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LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

NOW IN THE COURSE OF DELIVERY IN THE UNIVERSITY OF PARIS.

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LECTURE XIII.

ATROPHY OF THE BRAIN AND SPINAL MARROW.

(Continued.)

GENTLEMEN,—In our last lecture we were occupied with a consideration of atrophy of the nervous centres. We described the anatomical lesions which characterize that lesion, and the symptoms accompanying it, but we were not able to complete our subject in a single lecture; let us now then pass to the history of atrophy in other parts of the cerebro-spinal axis, including the pons varolii, the cerebellum, and the spinal marrow.

Atrophy of the Mesocephale

(the pons) has been observed, but this is a very rare lesion; indeed we are acquainted with only one case of this kind; it has been published by M. CRUVEILHIER, to whom we owe so many interesting facts connected with pathological anatomy. In the case now alluded to, M. CRUVEILHIER found the pons varolii considerably deformed; it was at least one-third smaller than we find it in the normal state; this diminished volume of the mesocephale coincided with a remarkable atrophy of the anterior pyramidal body on the left side. The subject of this observation was affected with hemiplegia; half the body was paralytic, although no other lesion existed to explain the modification of motility than an atrophy of the annular protuberance. The intellectual faculties were intact; the individual seemed capable of reasoning and judging as perfectly as most men, but a remarkable phenomenon manifested itself in the functions of the organ of language; the patient was quite dumb, incapable of uttering articulate sounds to express his wants, his desires, &c.; yet M. CRUVELHIER remarks that before the first symptoms of hemiplegia had set in, this individual spoke perfectly well. In our former lectures you saw an impossibility of speaking connected with other lesions of the nervous centres; with congestion, hemorrhage, encephalitis, &c. Here the organic change was quite of a different nature, yet the symptom to which it gave rise was the same; another proof of what we have said on the frequency with which various lesions of the brain produce an identical derangement of function.

We have now touched upon the history of atrophy as it manifests itself in the cerebrum and mesocephale; but if we desire to attain an intimate knowledge of this lesion, and avoid all source of error in the manner of estimating its degree, or even sometimes its existence, we must remember that certain parts of the cerebro-spinal axis exhibit a marked difference of volume, according as we examine them at different periods of life. It is certain that the nutrition of the nervous centres is not the same in all individuals and at all ages; hence arises a difference in the

Form, Volume, and Consistence of the Nervous Centres

with which we should be acquainted, otherwise we may mistake a normal modification for an organic lesion of the brain. You will find this subject treated in a masterly manner, in the thesis of M. CAZAUVIEHL, to which we have already more than once alluded. You will there find it proved in the clearest manner that the volume of the brain differs as we examine it in the child, the adult, and the old person. In extreme old age the dimensions of the cerebrum are evidently modified; if we measure the diameters of the brain, in a person far advanced in life, at the level of the centrum ovale of of Nicussens, we find it has lost in two di-

rections; the transverse and longitudinal diameters of this part are diminished by some lines; the brain is less than that of an adult, both in its thickness and its length. This difference of volume is not confined to the portion of the brain just mentioned. We find a reduction of bulk in various other important parts; thus the corpora striata, the optic thalami, the mesocephale, all these differ as we examine them in the young person, in the adult, and in the old man. The assertions we have just made are not mere ideas, vague and imperfect maxims, unsupported by proof; they are founded upon accurate and repeated measurements which have been made of these different portions of the brain, at different periods of existence.

There is, however, one circumstance connected with this subject so remarkable that we cannot pass it over without notice. While the various parts of the cerebrum increase from childhood to adolescence, from youth to full-grown manhood, and then diminish in advanced old age, the cerebellum is the only portion of the brain that does not undergo any change,—that remains the same in old age, as at any other period of life.

The reduction of the various diameters of the cerebrum in old age has also been established by another mode of investigation. M. Desmoulins found that in individuals who had passed their seventieth year, the specific gravity of the brain is reduced by $\frac{1}{20}$ to $\frac{1}{18}$ from the average weight of the adult brain. ("Anatomy of the Nervous System in Vertebrated Animals," t. 11, p. 620.) This diminution of the normal volume is certainly connected with a change of function, and perhaps the time may come, when, better acquainted with the normal disposition of the several parts that compose the brain, and with the varieties of this disposition depending on individual conformation, the influence of age, &c., we may be able to explain several derangements of function whose causes are now involved in obscurity because the examination of the dead body does not reveal any appreciable lesion to which we can refer them. Let us now turn to

Atrophy of the Cerebellum

and spinal marrow. Atrophy of one or both these portions of the cerebro-spinal axis may be, as we have already seen it to be in the brain, less a true atrophy or diminution of substance once well conformed, than an effect of imperfect development. The reduced volume of the cerebellum or spinal marrow, then, depends, not on a lesion of nutrition, but on a diminished activity or arrest of the developmental nisus. The first remark we have to make, in connection with atrophy of the cerebellum is, that in all cases where the cerebellum has been completely absent, the hemispheres of the cerebrum are equally absent at the same time; the disappearance of one portion seems necessarily to bring with it the absence of the other. In cases of this kind the individual is totally incapable of living when separated from the mother-stock; malformation, carried to such a degree, admits of fetal life and no other. The child perishes of necessity a few hours after it has been placed in relation with the external world.

Cases have been observed where the cerebellum has been more or less absent, although the hemispheres of the cerebrum are developed in a normal manner; a case of this kind, which is perhaps unique in the annals of the science, has been published by Dr. Combette; you will find it in the *Revue Médicale*, No. for April, 1831. Here we find the

Cerebellum completely Absent.

In its place nothing was found but a quantity of serous fluid contained in the membranes; on each side a peduncle, not larger than a pea, was attached to the corpora restiformia, all the rest seemed replaced by a serous sac. The pons varolii as well as the cerebellum was absent, and the individual in whom this remarkable lesion of the cerebro-spinal axis was observed, had attained the age of eleven years: thus you see that agenesia, or total want of the cerebellum, does not necessarily render existence impossible, provided the other parts of the nervous centres be well conformed. The individual may even live for a considerable length of time; the child here was near twelve years of age, and we have reason for considering the disease as congenital, for had it been acquired, had this absence of the whole cerebellum depended on an actual destruction of the nervous substance caused by an organic lesion, it is not probable the child could have survived so long.

What were the phenomena observed during life in this case of complete atrophy of the cerebellum and mesocephale? What effect did it produce on the intellect? What modification in the function of motion? The intellectual faculties were obtuse, though not to a remarkable degree; the answers slow and difficult; the whole countenance expressive of stupidity: in a word, the child, though not exactly idiotic, still showed a deviation of the mental powers. The motility was also modified; the power of motion was considerably weakened in the lower limbs, which did not possess their natural force and vigour: hence the child was unable to support itself with any firmness; it fell down frequently; the legs crossed each other during walking, and were moved in an irregular unsteady gait. At length the child was compelled to confine itself altogether to bed, and after some time was

unable to stir, even when lying in an horizontal position: thus you see the modification of motility consisted in a gradual abolition of motion: to this were joined epileptiform convulsions, which continued for some time, and finally carried off the patient. The sensation of the integumental covering was not modified in any way whatever. There was no increase of sensibility in the commencement, no obtuseness or diminution of feeling, even when paralysis was most complete: the senses also remained intact. The child could see, hear, and taste in a perfect manner. The functions of nutrition, of circulation, and respiration, were carried on without any notable disturbance; however, the child is mentioned as being weak and delicate in constitution; a circumstance which is conformable to the opinion of older physiologists, who have attributed to the cerebellum the power of regulating nutritive life.

In what manner were the generative functions influenced? This is a question of peculiar interest in the present case, because the cerebellum was completely absent. How then do we find the reproductive organs? Gentlemen, the uterus, the fallopian tubes, the ovaries; in a word the whole generative system was normally conformed; and, moreover, the child, who, if you remember, was only eleven years of age, showed a precocious tendency to the passions of her sex, and was given to masturbation.

The case we have just noticed is one of too interesting a nature not to dwell upon it an instant and consider what general conclusions may be deduced from the phenomena by which it was accompanied. They are the following:—*First*. That abolition of the intelligence does not necessarily attend complete absence of the cerebellum: the mental faculties may even be moderately developed. *Secondly*. The power of motion in the lower limbs was lost; hence we conclude that the cerebellum acts on the faculty of motion, and is more or less necessary to its perfect accomplishment. *Thirdly*. There was no paralysis of sensibility, and hence the general feeling is not connected with the cerebellum.

Instead of complete absence of the cerebellum, as seen in the case just detailed, we may have a

Simple Diminution of its Volume.

Sometimes this atrophy is general; all parts of the organ are generally reduced in bulk. In the case communicated by Baron Larrey to Gall, and recorded in the work of this latter author, the posterior portion of the cerebellum was considerably diminished. Here the lesion was accompanied by a change of form in the osseous parietes, and could be discovered by an external examination of the head. The genital organs were also imperfectly developed. Gall moreover asserts, that in individuals who have been castrated, the external occipital region undergoes a diminution of volume. According to him this phenomenon is constant; however, we would not undertake to render ourselves responsible for its accuracy. In page 271 of his great work on the anatomy of the brain, you will find another example of coincidence of a diminution of one of the lobes of the cerebellum, with a diminution of the testicle in the opposite side of the body; but he does not mention whether this partial atrophy of the cerebellum was attended with any modification of the intelligence, of sensibility, or of motility. Carried away by the pursuit of a favourite idea, he sees nothing but the reproductive organs, and the lesions they may present, without occupying himself with the phenomena of still more important systems. Other authors mention cases of atrophy of one or both lobes of the cerebellum, yet they do not mention any change in the form or disposition of the genital organs, or any derangement in their function. Indeed it is certain that a congenital lesion of this part of the brain does not of necessity bring after it a lesion of generation.

In volume fifth of the *Archives Générales de Médecine*, p. 99, you will find a case of diminution of one of the lobes of the cerebellum, where the principal phenomenon was a loss of sight (and remember how blindness is connected with numerous lesions of this part of the brain); the individual was an idiot from birth, but did not present any modification of the sensibility, or any derangement of the generative apparatus. An interne, M. Perot, has also described a similar case of partial diminution of the cerebellar lobes, and here again we do not find any lesion of the genital organs.

Atrophy of the Cerebellum on one Side, and its Connection with Paralysis.

When treating of cerebral hemorrhage and its effects, we stated the curious, though well-established fact, that when effusion of blood takes place simultaneously into opposite sides of the cerebellum and the cerebrum (as, for example, into the left lobe of the cerebellum and right hemisphere of the cerebrum), the latter organ acts alone, seems to absorb the power of the former, and loss of motion occurs only on the side opposite the lesion in the cerebrum; on the other hand, when hemorrhage takes place into the substance of the cerebellum alone (the cerebrum remaining intact), we have constantly paralysis in the opposite side of the body. It is remarkable that the same phenomena occur in atrophy of the brain; thus, when the cerebellum is atrophied on the left side, and the cerebrum is, at the same time, diminished in volume on the right side, the former does not exercise any influence over the motions of the body; its effect

seems lost in that of the cerebrum, and we only find paralysis on the side of the body opposite the lesion in this latter portion of the nervous centres. We have examined the archives of our science to determine how far the law now announced, which is fully true with respect to cerebral hemorrhage, may be applicable to atrophy of the cerebellum. We have been able to discover only three cases of atrophy of one hemisphere of the cerebellum, coexisting with atrophy in the opposite hemisphere of the cerebrum, and in all these three cases only one side of the body was paralyzed—viz. that opposite the diminution of the cerebrum. One of these cases is recorded in volume fourteen of the *Archives Générales de Médecine*; it is also described in the thesis of M. Cazauviehl on agenesia; here the patient, a female, was affected with hemiplegia of the left side of the body; there existed in the brain atrophy of the left hemisphere of the cerebellum, and at the same time atrophy of the right hemisphere of the cerebrum. The second case was communicated to the *Anatomical Society*, by M. Bodry, interne in the hospitals, and may be found in the annual report of the Society for the year 1830; this individual had hemiplegia on the right side, but, on the left, motion and sensation were intact; after death were found atrophy of the right lobe of the cerebellum, and, at the same time, atrophy of the cerebral hemisphere on the left side. Finally, our third case has been published by Mr. Bell, of the *Saltpetriere*, in the "Bulletin" of the *Anatomical Society* for May 1831; the subject of this observation was paralytic at the left side of the body. On examining the body, Mr. Bell found a considerable atrophy of the right cerebral hemisphere, and a diminution of volume, with flattening of the left hemisphere of the cerebellum. In this latter case, the individual was subject to apoplectic fits, and here let us remark the coincidence of epilepsy with a lesion quite different from that to which it is commonly attributed.

Atrophy of the Cerebellum alone, or conjoined.

Sometimes partial atrophy of the cerebellum exists alone, or is accompanied with an opposite state of another portion of the cerebro-spinal axis—viz. hypertrophy of the spinal marrow. M. Hutin has given us an example of this kind in a journal, entitled, "Nouvelle Bibliotheque Medicale," t. 1, p. 34, January, 1824. Here the atrophy occupied the medullary centre of each lobe of the cerebellum; the white substance of the corpus rhomboideum did not exist, but that body was represented by a small pyriform, hard, brown-gray mass; the whole extent of the spinal column was hypertrophied; the chord, instead of leaving a considerable interval, as it does in the normal state, between the parietes of the vertebral cavity, completely filled it, and was, at the same time, indurated. What were the symptoms in this case? The chief phenomenon was an excessive sensibility of the whole skin. The patient was unable to stand upright, because the soles of the feet were too tender to bear his weight. When any part of the skin was touched, he gave signs of excessive sensitiveness, and even great pain, sometimes manifested by convulsive movements. At length the external world became, at every instant, a cause of pain; the unfortunate patient was unable to stir, or place himself in relation with a single object, and he at length died, wasted, exhausted, and literally worn down by painful sensations. This fact is a very remarkable one, and although the history of the case is given by M. Hutin, with some details, yet we find no mention whatever made of the genital organs.

These are the principal facts we know connected with atrophy of the cerebellum; we may add, that the lesion may exist alone, or in union with atrophy of some other part of the nervous centres: thus, for example, it is not uncommon to find a diminished volume of the cerebellum coincide with atrophy of the spinal marrow. In some cases it is a true agenesia of the chord that we observe, not an arrest of development. Here we do not find any trace of the cerebro-spinal axis; the cerebrum, the cerebellum, and the spinal marrow, are all equally wanting; and the fœtus, like those which we have already noticed, is incapable of sustaining an extra-uterine existence. This lesion is denominated "Amyelia," that is to say, a condition in which

The whole Spinal Marrow is Absent,

while a fluid, contained in a membrane, somewhat similar to the meninges, fills its place, and the nerves, which in a normal state are attached to the chord, seem to derive their origin from the rudimentary membrane. We find, at the same time, two different conditions of the osseous parietes which enclose the chord. In the *first*, the bones comprising the vertebral cavity are involved in the same lesion as that which has affected their contents, and we find the whole cavity open at its posterior part, or more or less imperfectly formed in the different regions; in the *second* case, the vertebral canal has attained its perfect degree of development, although the substance of the chord may be reduced to its maximum of atrophy; this is the same thing that we have already observed for the brain, where absence of the encephalon coincides with a well-formed skull, or with various lesions of the cranial parietes.

Imperfect Development of the Spinal Marrow.

Instead of being completely absent, the spinal marrow may present merely an im-

perfect development of one or more parts; the lesion is then called "atelomyelia," and may exist with a great variety of degrees. Thus in some cases we may find a greater or less portion of the spinal marrow divided, as in the fetus, into two lateral portions, from the absence of the gray substance that unites the two distinct chords, which, at an early period, constitute the spinal marrow. These two primitive chords or lateral portions form, by their approximation, a kind of furrow, which, at a later period, is transformed into a canal; this canal is really permanent in many animals, but in the human subject it is ordinarily obliterated at birth; however, it may persist, and then we find a canal of greater or less extent occupying the centre of the spinal marrow, commencing at the upper part, and seeming to form a junction with the fourth ventricle. In several cases the white or medullary substance appears to be perfectly well developed, and the lesion of nutrition affects exclusively the gray matter of the chord. Is it to a want of development that we should refer the presence of a canal in each lateral portion of the spinal marrow? GALL described these canals as existing in the normal state, but this is now found to be an error; however this may be, M. CALMEIL saw the lateral canals in the bodies of two insane patients (*Journal des Progres et des Institutions Médicales*); in one they existed all along the two sides of the chord; in the other it was impossible to follow them beyond the cervical region.

Instead of imperfect development, we may find a

Simple Diminution of the Volume of the Spinal Marrow,

without any change of its organization; this diminution may be either general or partial; when general, the lesion is very easily discovered. We see that the bulk of the chord is evidently reduced below the normal standard. M. MAGENDIE has recorded a case of this general atrophy of the chord, in which the lesion was accompanied by paralysis of the limbs. M. OLIVIER has also seen two examples of the same kind; in one, the volume of the chord was reduced to at least one half of its normal bulk; in the second, the whole chord was one-third less than it ought to have been. We have already remarked, that atrophy of the spinal marrow may be partial, occupying only a small portion, or a particular region, of the chord. You know that the portion of the nervous centres contained in the vertebral canal presents a kind of swelling (*renflement*), or

Protuberance at the Origin of the Nerves

which are attached to it. In cases of partial atrophy, one or more of those protuberances may be absent. Thus in a case observed by M. HUTIN, the diminution of volume engaged chiefly the lumbar renflement, which was reduced to the size of a common pen. In another case, cited by the same author, the brachial and lumbar protuberances were atrophied at the same time.

The Medulla Oblongata

(*bulbe rachidienne*) may also be reduced to such a degree of smallness, as to seem wanting. M. CRUVEILHIER has described a case of this kind in a child, in whom the atrophy of the bulb coincided with an excessive density of this part; in fact, it presented almost a stony hardness; it was also accompanied by a conversion of nearly the whole substance into gray matter. We have already mentioned a case where atrophy of the cerebellum gave rise to loss of speech. In the case just mentioned a similar phenomenon was observed, or rather the child was affected with a great difficulty of speaking; she spoke excessively slowly; pronounced each word syllable by syllable. The power of the muscles that act on the larynx and pharynx was gradually abolished, and the child died from a difficulty of deglutition, joined to a loss of mechanical power of respiration; the muscles of the chest becoming finally implicated, respiration was rendered more and more difficult, and death took place in a state of true asphyxia. Indeed it may be laid down as a general rule, that atrophy of the spinal marrow in most cases produces a greater or less degree of paralysis. This loss of motion becomes gradually more extensive, more intense. The respiratory muscles are at length implicated in the general disorder; a difficulty of breathing sets in; the patient soon loses the power of dilating his chest, and dies asphyxiated.

Ramollissement of the Brain.

We have now studied two principal lesions of the nervous centres opposed to one another in their anatomical characters, but not so different as you might be inclined to imagine, in the functional modifications which they produce. We have concluded the history of hypertrophy and atrophy. We must now turn to another class of lesions, where the number of molecules remaining the same, they present a change of consistence, and become either hardened or softened. We have already touched upon several points intimately connected with softening of the nervous centres, for it is absolutely impossible to lay aside the consideration of ramollissement, to separate the pathological history and the symptoms of this affection, when we speak of various other diseases of the brain, as, for example, encephalitis, apoplexy, meningitis, &c. They approach so closely in certain points, that we cannot trace a faithful history of the one, without frequently introducing the other; however, we must study ramollissement

apart, if we desire to obtain a correct knowledge of its progress, symptoms, and termination. We must examine it independently of inflammation of the brain, of abnormal injection of the nervous pulp, independently of congestion and sanguineous effusion. In a word, we must study this important lesion by itself, apart from all others, and we shall endeavour to push our investigations as far as the actual state of medicine will permit, although we may occasionally have to repeat our observations, and employ, again, certain illustrations which you have already heard in a former part of the course. We will commence with ramollissement of the nervous centres in our next lecture.

CLINICAL LECTURES

ON

SURGICAL CASES,

DELIVERED IN 1836, AT THE

JERVIS-STREET HOSPITAL, DUBLIN,

BY

WILLIAM WALLACE, M.D., M.R.I.A.,

Surgeon to the Hospital, and to the Infirmary for Diseases of the Skin, Venereal Diseases, and Diseases of the Urinary and Genital Organs.

TETANIC SYMPTOMS, OR LOCKED JAW, RESULTING FROM INJURED NERVES.

GENTLEMEN,—I will commence this day's lecture by relating to you the heads of a very rare and interesting case:—

Philip O'Neill,

A tall muscular countryman, of a sanguineous temperament, and very blue eyes, aged between thirty and forty years, was thrown down, while leading a cart-horse over Essex bridge, when the wheel of the cart traversed his left leg a little below its middle, causing a fracture of both bones, with a communicating wound. He was immediately conveyed to this hospital, and being placed in bed, was treated according to the common practice.

No remarkable symptom occurred until the morning of the seventh day, when I was much surprised to find the bandages and splints greatly deranged. I was the more surprised at this, as up to that period the position of the limb had not sensibly varied from one visit to another, nor did the patient complain, at any time, of any uneasy feelings from position or bandages. Indeed, every thing had progressed in the most favourable manner, from the day of his admission, until that on which the displacement occurred. The wound had also begun to granulate, and even to cicatrize. Although I made strict inquiry, I could not ascertain, from either nurse or patient, the cause of displacement. The bandages were re-adjusted, the limb was replaced in a proper position, and thus the patient was left, without my feeling any particular anxiety about his future state.

On the following morning, that is, on the eighth day after his admission, I found the limb again displaced; and I was informed that he had had a very restless night; that there were frequent spasmodic twitchings in the fractured leg; and that he found it impossible to preserve it during the night in the position in which it had been placed.

Such was the commencement of a series of as untoward symptoms as any I have ever witnessed. I shall not detain you with the daily reports of the case,—suffice it to say, that this patient, who had been advancing in the most favourable manner for seven days after admission, died four days after the spasms commenced in his leg; that is, on the eleventh day after the injury was received. The spasms gradually increased, from the morning of the eighth day, and in the course of thirty-six hours arrived at a state which it is difficult either to conceive or describe. Spasm is a bad, or insufficient, term to use. The limb was convulsed, and so constantly and so much, that for scarcely a minute could it be kept either by the efforts of the patient or by the pressure of assistants, firmly in any one position. Indeed, all such attempts seemed greatly to increase the convulsion. It was not only tossed to and fro, but occasionally raised with convulsive force, even some feet, from the surface of the bed. The bandages and splints could no longer be kept on. The wound in the soft parts (which parts had now altogether lost their healthy aspect and had become pale and glassy) as well as the fractured bones, appeared to be quite disregarded, so violent were the pains which the muscular actions produced. The lower fragment of the limb was thrown during the spasms into every possible position; with regard to the upper, it was knocked about like the loose arm of a flail used by a thrasher of corn, at one time being bent forwards, at another backwards, or to one side or the other, at angles of various degrees; and the bones at these periods protruded at the wound to a great extent.

The convulsions of the limb in a short time extended upwards, and then the muscles of the thigh co-operated with those of the leg, in producing the most violent and unrestrainable tossing or dashing about of the whole limb. At the end of the second day after the spasms had commenced, his countenance acquired a tetanic aspect, and he began to complain that his jaws were rigid, and that he could not swallow. Upon trying him with a little drink, I found that every time he attempted deglutition, a violent spasm took place in his throat, by which the

further progress of the liquid was obstructed. The situation of the poor fellow was at this period a source of the greatest distress to me. His symptoms were uncontrollable by any means devised, and his sufferings appeared to be great indeed.

On the fourth day, as if worn down by violent and constant pain and spasmodic action,—by exhaustion from absence of all sleep, and from want of nutriment, his countenance became pale and sunken, and his pulse tremulous, rapid, and weak. But the spasms in his limb and all muscular rigidity having at the same time ceased, and the power of deglutition having returned, I could not avoid having some hope, notwithstanding the degree to which he had been worn, that a favourable change was about to take place. On the following morning, however, my expectations were dashed, by finding that the poor fellow was no more; that he had died a few minutes before I entered the hospital, that is about twenty-four hours after the muscular system had become quiet.

I examined the body on the subsequent day, and have preserved this drawing, and the following notes of the

Morbid Appearances.

"The muscular system in general is rigid, and the muscles are marked, as if in a state of contraction. His countenance still presents a tetanic aspect. The pupil of the right eye is considerably more contracted than that of the left.

"*Right Leg.*—The upper portion of the tibia is protruded one inch through the wound. This leg is some inches shorter than the other, and the state of the muscles and other parts is such, that the limb cannot be brought to its natural length. Having made an incision in the skin, on the outside of the fore-part of the limb, both upwards and downwards, so as to increase the extent of the wound, and having dissected a flap on each side, the bones are found to overlap nearly two inches. Having next removed the peronei muscles from the middle third of the fibula, the fracture of this bone is observed to correspond to the part where it is crossed by the fibular nerve, as it turns round to the front of the leg; and this nerve lies on the upper end of the lower portion of the fractured fibula, which end is remarkably sharp. The nerve in this situation, and for an inch or two above and below, is preternaturally vascular and much thickened, and the surrounding are soft parts infiltrated with blood, and diseased from suppuration having taken place among them. It is very evident (I have observed in my note of the dissection), from the manner in which the muscles covered and crossed the nerve and the sharp end of the fibula, that every time they contracted they must have pressed the nerve firmly against the bone.

"*Head and Spine.*—A quantity of a serous bloody fluid exists in the cavity of the arachnoid. The vessels of the membranes of the cerebrum, cerebellum, medulla spinalis, and oblongata, are very turgid. Great effusion between the pia mater and arachnoid—particularly on the superior surface of the hemispheres. An effusion of blood on the outside of the sheath of the spinal marrow, nearly opposite to the middle of the chest. The plexus choroides livid from congestion; some reddish serum in the ventricle; the substance of the brain very firm, and over-vascular.

"*Abdomen.*—The gall-bladder contains much bile. The capillary vessels of some of the small intestines are in a state of congestion. The intestines are, in general, irregularly dilated and contracted, the transverse arch of the colon, and the cæcum, are much dilated, and the end of the ilium and several parts of the large intestines are irregularly contracted."

Was this a Case of genuine Tetanus or not?

In many points of view it strictly resembled tetanus, but not in others, provided we confine our views of tetanus within the bounds placed by some to the characters of this disease—or, in other words, if we deny the name of tetanus to every disease which does not present certain symptoms, in general considered pathognomonic. The period at which the spasmodic symptoms set in, viz. on the seventh day, and when the wound was granulating and even cicatrizing, is the

period and the state of the wound at which traumatic tetanus in general commences. The permanent rigidity of the jaws, the difficulty of swallowing, and, above all, the peculiar cast of countenance, were also in a high degree characteristic of tetanus. On the other hand, the manner in which the spasms commenced—that is, in the wounded limb, their gradual extension to the head, the absence of pain in the epigastric region, and of rigidity in the muscles of the abdomen, as well as of any decided spasms of the trunk, are all phenomena unlike what we commonly observe in genuine tetanus. The cessation of spasms, and the restoration of the power of deglutition, so long before death, are also symptoms which I have not observed in true tetanus. Nor have we any good reason for supposing that in this disease the cause of mischief is seated, as was evidently the case in the present instance, in an irritated or injured nerve, or that there exists such a state of the brain as was on dissection observed in this case. Such are the reflections which occur to me, when I compare the case of O'Neil with the numerous cases of ordinary tetanus which I have witnessed.

The case of Hagerty, noted in the hospital case-book, seems to me to have many points of analogy with the case of O'Neil, and what is important to us on the present occasion, it furnishes those symptoms which have been considered pathognomonic of tetanus, viewing this disease in the common manner, which were wanting in the case of O'Neil; while O'Neil's case affords symptoms, considered equally characteristic of tetanus, which were wanting in the case of Hagerty. I shall read you the heads of

Hagerty's Case.

This patient, who was a labourer, aged fifty-four years, was admitted with the soft parts covering the left great-toe, much contused and torn, and with a wound of the same shin, or of the front of the leg. These injuries had been caused by the limb having been jammed between a lamp-post and a cart. He had lost a large quantity of blood, and he complained much of pain extending up the leg. On the ninth day, when the wounds were suppurating and granulating healthily, the nitrate of silver was applied, by my directions, to some exuberant granulations on the skin. This application seemed to cause great pain, evinced by loud and repeated cries.

Tenth day. He still complained of pain, and he described it as shooting from the front of the foot and leg along the calf, ham, thigh, and back, up to the neck.

Eleventh day. He had several spasmodic twitches in the limb, which extended up the trunk.

Twelfth day. The spasms in the limb became more frequent and severe, and he complained of rigidity of his jaws, with inability to open them to their full extent. During the general spasms, the head and trunk were drawn backwards.

Thirteenth day. Same symptoms continued, and rather increased.

Fourteenth day. The jaws were much more fixed, and the muscles of the neck and abdomen were very rigid. On this day he had frequent general spasms, commencing in the limb.

Fifteenth day. He was as on the 14th, with the addition of pain in scrobiculo cordis.

Sixteenth day. Stiffness of jaws was increased, but the spasms were milder since yesterday. Slight drooping of the upper eyelid; pain in scrobiculo cordis less. Salivation commencing, from the calomel and Dover's powder, which he had been taking since the twelfth day.

Seventeenth day. Rigidity of neck diminished. Rigidity of abdomen nearly the same. Had four mild spasmodic paroxysms since yesterday.

Nineteenth day. Spasms much milder and less frequent; scarcely any rigidity of the muscular system; copious perspirations. Complains of sickness of stomach, or of what he calls a water-brash.

Twentieth day. Occasional, but very mild spasms. Rigidity of jaws, neck, and abdomen, diminished.

Twenty-fifth day. No spasms; no muscular rigidity. Suffers much from profuse salivation. Was discharged cured on the 16th of May, about six weeks after admission.

The Symptoms, if combined, in the foregoing Cases, are those of Genuine Tetanus.

You may observe, that this case presented, as I have said, certain characteristics of tetanus, which were wanting in the case of O'Neil. Thus, there existed in Hagerty's case, abdominal rigidity, pain in scrobiculo cordis, and convulsions of the trunk, during which the body was bent backwards; while certain symptoms were wanting which were found in the case of O'Neil, and which are considered equally pathognomonic as those which did exist. Of these, the most remarkable was the absence of the tetanic countenance, which was strongly marked in O'Neil, and was testified in Hagerty simply by a drooping of the eyelid, and this observable only on the sixteenth day, and perhaps not deserving of being considered expressive of a tetanic countenance.

When the case of Hagerty was passing under my observation, the impression was made on me, that the symptoms originated in an inflammation or morbid state of the peroneal nerve, as in the case of O'Neil; that this inflammation had commenced in the nerve so low as in the dorsum of the great-toe; that some of its branches, which

passed through the wound on the shin, had been irritated by the application of the nitrate of silver; that the inflammation or irritation had subsequently extended along the sciatic nerve, through the popliteal space, and up the thigh to the spinal marrow; and that thence resulted the more general muscular affections.

Now it is evident, that if we combine the symptoms of the cases of O'Neil and Hagerty, we shall have all those that occur in the most genuine forms of tetanus. We shall, however, have also

One most important Symptom present, which does not exist in ordinary Tetanus,

so far as I have had an opportunity of witnessing the disease for more than fifteen years in this hospital, so famed for accidents. I allude to a spasmodic affection of the muscles of the part injured, and it was with this symptom that the general spasms commenced in the cases of O'Neil and Hagerty; whereas rigidity of the muscles of the jaws, or of the back of the neck, without any pain or convulsion of the limb, however severe or trifling the wound may have been, is the almost uniform mode of commencement of what is called genuine tetanus. In support of this fact, let me recall to you from the case book of the hospital the heads of two or

Three Cases of Genuine Tetanus.

Case 1.—Gannon, a strong and healthy child, aged three years, was admitted with a wound four inches long, which penetrated through the integuments, on the outer side of the knee-joint. The joint was not injured. A quantity of dirt and gravel was imbedded in the wound. There did not exist any apparent constitutional disturbance.

Third day. Suppuration commencing.

Seventh day. Wound granulating at its upper angle, sloughy at its inferior end. The child looks pale and sickly.

Eighth and ninth days. Restless and peevish.

Tenth day. Unable to open his mouth, and when he attempts to take a drink, a slight convulsion ensues, with a tetanic expression of countenance. The power of moving his lips, however, continues perfect, and when he is at rest, his countenance has not any tetanic appearance. No rigidity of muscles of either neck or abdomen.—*Evening.* His countenance has, even when at rest, the tetanic aspect. There exists a rigidity of the muscles of his neck and abdomen: and when a convulsion is excited by any attempt to drink, the head is drawn back, and, even when quiet, he is unable to bend it forwards.

Eleventh day. He had several convulsions during the night, when attempting to drink, but was quiet when not excited. His paroxysms became more frequent and more severe during the day.—*Evening.* He has had two violent paroxysms. One which he had at ten o'clock has been thus described in the case-book. His body is so violently bent backwards, that his occiput and heels alone touch the bed, his trunk and lower limbs forming an arch. All the muscles of his neck, back, upper and lower limbs, are hard and rigid. All the features of his face are violently contorted. His eyes are turned upwards and inwards. Subsequently, his breathing became laboured and stertorous, and afterwards so faint, that, joined with a state of insensibility, it was supposed he was dead. After a minute or two, however, he recovered, turned on his side, and called to his mother for drink.

These violent paroxysms recurred with an interval of an hour, until about three o'clock in the morning, when he expired.

Case 2.—Scully, aged eleven years, received a deep punctured wound in the hollow of the sole of his right foot, caused by leaping from a height on a thick blunt hook. He leaped from an ass-cart on the pavement to fasten the trace, which had become loose by the hook falling out on the ground, and it was on this hook he leaped.

Second, third, and fourth days. Accelerated pulse, restlessness, pain in the head, perspirations, foul tongue, sick stomach.

Fifth, sixth, and seventh days. Seemed to be progressing to recovery.

Eighth day. Frequent yawning, of which he himself complained.

Ninth day.—In the morning complained of stiffness in the back of his neck, and difficulty of deglutition. No inflammation in his throat to be observed. No pain in fauces. —*Mid-day.* Muscles of jaws rigid. Considerable difficulty of opening his mouth; pain felt in the epigastrium, when he attempts to sit up. Muscles of abdomen slightly rigid. The tetanic aspect exhibited in his countenance by a wrinkling of his eyebrows and forehead, and by a divarication of his nostrils.—*Evening.* Irritability of stomach. Rejects his drink. Very frequent convulsive paroxysms; each lasts, however, only a few seconds; during these, the muscles of the back are contracted suddenly, and, by a quick jerk, throw forward the abdomen. Each paroxysm is attended also by a quick expiration, and an increase of pain, which he refers to the epigastric region, and which elicits a groan. During the intervals of the paroxysms, the rigidity of the muscles of his abdomen and neck continues. He frequently asks to be placed sitting up in bed, and when the attempt to raise him is made, he becomes from head to foot as rigid as a board. When he wishes to take drink, which he can do only while sitting, he is unable to bend his head forward, and asks impatiently his father to bend it. His skin in general is moist, and his face and breast are in a state of perspiration. Pulse 120.

Tenth day.—He had a paroxysm every five or six minutes during the night, and, on one of these occasions, the opisthotonos was so violent, as to raise him almost entirely out of the bed. The least exertion he makes, on turning him, or asking him a question, or even any sudden noise, produces a paroxysm; and, independently of any excitement, he has one every three or four minutes, but each lasts only a very few seconds. He complains of having bitten his tongue, and often cries out with pain, which he refers to his loins. He seems occasionally to drop for a minute into a doze—his eyes half closed, but, in an instant, he awakes with a sudden jerk. His stomach is very irritable, and occasionally rejects its contents.—*Evening.* Paroxysms more frequent—during five minutes he had no less than ten; his pulse during the paroxysm is 138, in the interval 108. Bowels confined; makes no mention whatever of his foot. The wound is nearly healed.

Eleventh day.—Is extremely weak; paroxysms have been very frequent during the night, but they were not so violent, nor did he cry out with them so much, as before. Complains of pain in his belly, and back of his neck. Has a strong desire to drink, but says there is a stoppage in his throat. Complains of itching in his face. His fingers are not engaged during the paroxysms, nor are they rigid in the intervals.

Not to detain you longer with particulars, this child died in a convulsion, on the fifth day from the commencement of the tetanic symptoms, and some time previous to death, great dyspnœa, with delirium, set in.

Case 3.—Sadleir, aged 30, a strong and healthy labourer, had his right hand jammed between two beams of timber, in such a manner, as to cause the phalanges of the three fore-fingers to be over-extended or flexed backwards, so as to produce a compound dislocation of their articulation with the corresponding metacarpal bones. The flexor tendons were torn across, where they cover the joints, and the cartilaginous surfaces of the bones were visible. The metacarpal ends of the phalanges were thrown on the palmar aspect of the metacarpal bones. There was a wound between the thumb and fore-finger, about half an inch long, through which a mass of muscular flesh was protruded in such a manner, that it seemed to be girt by the orifice of the wound. The bleeding was trifling. He complained much of a sense of numbness, but of no pain. The parts were easily restored to their natural position, and the injury appeared then so trifling to him, that when the propriety of removing the fingers was hinted at, he expressed himself so strongly against an operation, that it was not further spoken of.

Third day. Suppuration with much tumefaction.

Fourth day. Increase of discharge, which is rather thin. The skin of his hand and forearm presents a slight blush of red as far as the elbow.

Fifth day. Matter formed on the dorsum of the hand, in the course of the tendons, and discharged by an incision.

Eighth day. Complained of soreness and stiffness of the jaws and throat. His tonsils seemed inflamed and enlarged. In the evening he complained of pain in the epigastrium.

Ninth day. Stiffness and rigidity of his jaws, and inability to open his mouth increased. Profuse and general perspirations. Has had two convulsive paroxysms; pulse 102; complains of no pain.

Tenth day. He expired this morning, immediately after a spasmodic paroxysm. It was reported that he had had a spasm, almost every hour, from the evening of the ninth day, until the morning of the tenth; that they became more and more severe; that during the paroxysms his face became almost black; that all night the muscles of the back of the neck and of the abdomen had been in a state of great and constant rigidity; that at first the spasms had lasted about one minute, but subsequently not less than a minute and a half.

En passant, I wish to observe, that this was one of the most rapid cases of tetanus which I have ever witnessed, and the violence of the symptoms was by no means proportioned to the rapidity with which the disease ran its course. The patient was kept under the influence of tartar emetic from the first appearance of the disease, until his death, and from what I observed in this case, I would never again think of trying that remedy.

In none of these cases, and if necessary I might detail to you many others, did the wounded limb attract attention, either by pain or spasm. Were there no other circumstance than this, to distinguish them from such cases as those of O'Neil and Hagerty, this alone would be quite sufficient; and if the latter cases are to be viewed as examples, they should be considered to form a variety distinct from the former.

There has been much discussion respecting what is

The Wounded Tissue which is the immediate Cause of Tetanus.

You are all aware that the opinion prevails that this disease is produced by wounds of tendinous parts. Are not such cases as those of *O'Neil* and *Hagerty* highly suited to cast light on this obscure point in pathology? For example, if the irritation or inflammation of a large nerve is capable of influencing the centres of the nervous system in such a manner as to cause a series of symptoms almost identical, if not entirely

similar, with those of genuine tetanus, we are prompted by analogy to infer that it is in some such way that ordinary tetanus is produced. Nor does our incapability of discovering in this disease organic lesions in the nerves of the injured parts, authorize us to conclude, in our still imperfect knowledge of minute structure, that no organic lesion exists. And if the immediate cause of tetanus be seated in the spinal portion of the nervous system, as the inquiries of my friend Dr. REID of this city, and, subsequently, of others, go to prove, an additional argument will thereby be afforded for inferring that it is an injury of the nervous tissue that gives origin to tetanic disease, and not of either the tendinous, or, as some suppose, for example the late Dr. PARRY, of the muscular.

It is remarkable that the effects which we know to arise from an irritated nerve, are always more severe a few days after the injury has been inflicted, than immediately on its receipt. This corresponds with the phenomena presented by tetanus. For the symptoms of this disease rarely indeed commence for some days after the infliction of the injury which causes it. In the cases of *O'Neil* and *Hagerty*, the nervous symptoms began, as I have already observed, about the same time, and in the same state of the wound, as we would have expected tetanus. Thus in *O'Neil*, the first symptom of nervous mischief was on the eighth day, and in *Hagerty*, on the tenth day, while in the cases of *Scully* and *Sadleir*, they commenced on the eighth day; and in the case of *Gannon* on the tenth day. This points out a close relationship among these affections.

In the memoirs of Baron LARREY, you will find many facts, which, in my mind, demonstrate the probability that a local injury of nerves is the immediate source of mischief in tetanus. He often noticed, for example, a remarkable connection between the character of the tetanic symptoms and the situation of the wound which caused them. He observed, both in Egypt and Germany, that when the wound involved nerves in the front of the body, the symptoms were emprosthotonic, and when those on the posterior part, opisthotonic; but that when both classes of nerves were injured, complete tetanus ensued. It was also a remark made by him, that wounds in the course of the larger nerves were very often followed in the climate of Egypt by tetanus. But, what is still more to the purpose, you will find on record some cases which are related as cases of tetanus, in which there was an injury of a nerve more or less similar to that which occurred in the case of O'Neil, and probably also in that of Hagerty.

Mr. LISTON, one of the able professors of surgery in the *University of London*, has given us, in the *Edinburgh Medical and Surgical Journal*, a case of tetanus in which he performed amputation with temporary relief, and when he examined the amputated limb, he found that the branch of the median nerve going to the thumb was torn two-thirds across, and its extremity inflamed and thickened for nearly an inch. He also, subsequent to the death of the patient, found about two inches of the same nerve at the bend of the arm, very vascular, but without effusion or thickening of the envelope.

Dr. HENNAN has, in his *Military Surgery*, mentioned that he found the radial nerve thickened, and a small splinter of bone sticking in it, in a man who died of tetanus.

Baron LARREY has recorded the case of the son of a general officer who died of tetanus, consequent on amputation; and upon examining the stump, the median nerve was found included in the ligature with the artery. He also mentions a case in which he suspected that tetanus was caused by a ligature on the crural nerve. He removed the ligature, cauterized the nerve, and the man recovered.

You will also find, in the first volume of LALLEMAND'S *Researches on the Brain and its Appendages*, the case of a soldier, aged about 38 years, whose subclavian artery was tied for aneurysm. When the ligature was drawn tight on the vessel, the patient experienced great pain in the neck. This pain diminished the next day, but on the fourth and fifth days it became very severe. On the seventh night, there was "perte de connaisance," particularly of the inferior limbs. (LALLEMAND conceived that the convulsions of the upper limbs had been prevented by the bandaging.) Immoveable pupils, short and frequent respiration, small and irregular pulse. On the eighth day the head was drawn back by spasms, and death took place in the evening. On dissection, it was found that the ligature on the subclavian artery had included the branch of the brachial plexus, which comes from the third pair. An abscess was found in the posterior lobe of the left hemisphere. The vessels of the cerebral substance, and those of the pia mater, were preternaturally developed, and the ventricles contained some reddish serosity.

There are probably other cases of an analogous kind on record, which I have either not read, or which may have escaped my memory. Those which I have mentioned are, however, quite sufficient, in connection with the two which we have ourselves witnessed, to authorize us to conclude that there does exist a form of tetanic disease, which is in very close relation with, if not entirely dependent on, an injury of a nerve. May we not, as I have already said, consider such cases as forming a peculiar variety of tetanus? This seems to me to be the more correct way of considering this subject.

When we reflect on the different results which have followed the same kind of treatment in different cases of tetanus, I think we are compelled to believe that authors have included under this term many forms of disease which differ so essentially from each other, as to require dissimilar modes of treatment. This would certainly be a natural way of accounting for the discrepancy which exists among reported cases.

Of the various Modes of Treatment

adopted, there are few that have afforded more discordant results than that by amputation. It is, in general, now never thought of; yet LARREY seems to have obtained advantage from the practice, and even from the division of the nerve leading from the injured part. I confess, that when I reflect on the facts connected with this subject, I am disposed to conjecture that the cases of tetanus in which this mode of treatment will be beneficial, are such as those we have been considering; and I have scarcely a doubt on my mind, that, if amputation had been performed at a sufficiently early period, or the irritating extremity of the fibula removed, or even if the injured nerve had been divided in some part of its course, between the spine and the seat of injury, the life of O'Neil might have been saved.

Should further investigations lead to the conclusion that there is a peculiar form of tetanic disease, which has for its cause an injury of a large nerve, and that these are the cases in which an early amputation, or the division of the nerve between the injured part and the brain, is likely to be useful, our attention will be directed to distinguish such cases from others; and I am induced to believe, from what I have seen, and for the reasons already advanced, that the situation or part in which the spasms commence will be a powerful assistance, as a

Means of Diagnosis,

if not of itself sufficient. It is to be regretted that in the recorded cases I have mentioned, and in which the symptoms were connected with an injured nerve, no notice has been taken as to the exact manner or situation in which the spasms commenced. They do not, therefore, afford us the assistance on this subject which we might otherwise obtain from them. RICHERAND says, that he has sometimes noticed in wounds which threaten tetanus, that a persevering extension of the limb during sleep often manifested itself before other symptoms were observed. Do such cases belong to the class of tetanic affections which arise from injured nerves of large size? To the same class most probably belong also three cases of tetanus recorded by Sir GILBERT BLANE, in two of which the symptoms affected the side of the body in which the wound was situated, and in the third, they were accompanied by a trifling and rather agreeable sensation in the part.

If there exists a form of tetanus dependent on an injury of a nerve, and if such form calls for amputation, or the division of the injured nerve, or the removal of the irritating cause, it must be clear, from the facts unfolded by the case of O'Neil, and by the cases recorded by LALLEMAND, that such cases will not be benefited by such operations, unless they be executed early, or before the disease has extended so far as to cause inflammation of the central portions of the nervous system. This precisely corresponds with the rule of practice given by LARREY; he advises that they be performed before inflammation commences.

Mercurial treatment has often been supposed to be useful in tetanus; and in the case of *Hagerty* there could be little doubt, from the close connection observed between the improvement of his symptoms and the commencement of salivation, that material service was obtained from the action of the mercury. Will further experience sanction the conclusion, that it has been in cases of tetanic disease arising from the injury of a nerve, that mercurial treatment has been serviceable?

In conclusion, and as my only apology for having occupied so much of your time with this lecture, I have to observe, that should it turn out, that it is in cases of tetanus from injury of a large nerve, that advantage is to be expected from mercury, or from amputation, or from the division of a nerve, or the removal of causes of irritation; and that the diagnostic symptoms, which I have laid down, are sufficient to distinguish these varieties of tetanus from others; it will thus be admitted, that a step has been achieved in the study of the symptoms and in the treatment of a disease, respecting which every thing seems to be, as yet, in confusion. The facts which I have witnessed, those which are on record, and the reflections which both have created in my mind, encourage me greatly to endeavour on every opportunity to ascertain the distinguishing peculiarities of each case which may present itself to me. In short, I feel convinced, that one cause of failure in the treatment of this disease, has arisen from our great neglect of its varieties.

ST. GEORGE'S HOSPITAL.

CLINICAL LECTURE

ON A CASE OF

RANULA.

Delivered in the Session 1835-6.

BY MR. WALKER.

GENTLEMEN,—It is my intention to bring under your notice this morning the particulars of a very interesting case which presented itself a short time since amongst the out-patients under my care. It was one of sublingual tumour, occupying the usual situation, but differing in some points from that form of disease which is known and described to you under the name of "Ranula."

The patient, Elizabeth Holloway, an interesting healthy-looking girl, about 19 years of age, perceived for the first time, about two years ago, that a small tumour was growing under her tongue. At this time it was no cause of pain or inconvenience, either in swallowing or speaking, nor would she even have been aware of its existence had not her attention been drawn to it by a female relative who had herself a few years previously suffered from a tumour occupying the same situation, and who was, therefore, more sensible of a slight lisping in the speech of the patient. A few months since, the tumour, from having remained quiescent, began gradually to increase in size, and materially to interfere with the functions of the parts in the vicinity of which it was situated. Swallowing caused her inconvenience rather than pain, and her voice, from its natural soft tone, changed into a note much resembling that of a frog's croak. It is, in fact, from this peculiarity that the disease has obtained its name of ranula. Her voice was thick and reedy from the pressure caused by the tumour (which had now attained the size of a pullet's egg), upon the superior portion of the larynx. The lining mucous membrane of the mouth moved easily over the surface of the tumour, and there appeared to be no impediment whatever to the natural flow of saliva. You may remember that at about this time I introduced a blunt probe into the ductus Whartoniensis. It did not enter into the tumour, but passed downwards to its under surface, a circumstance which led me to prognosticate that the tumour was situated in the cellular structure under the tongue, and altogether unconnected with and unattached to the sublingual ducts.

She was extremely anxious to have the tumour removed, and I accordingly operated in the following manner:—She was placed in a window fronting the light; the head was thrown backwards and supported; the motions of the tongue were checked, and commanded, by its apex being pressed against the bony palate of the roof of the mouth. Whilst in this position, the mucous lining of the mouth, which was kept on the stretch over the tumour, was divided in that situation by the lancet, and the cyst of the tumour was exposed. That was next divided, and a considerable quantity of thick ætheromatous matter immediately escaped. On examination I found the cyst to be much firmer and denser in structure than is usually attained in these cases, and of sufficient tenacity to bear some firm manipulation. I secured it by a pair of common dissecting forceps at the opening previously made through the mucous membrane, and dissected it out with a flat aneurysmal probe. At its inferior position it was attached to the mucous membrane by a small peduncle, of about the size of a crow-quill, which was divided by the scissors. The operation proved troublesome, from the escape of the contents of the cyst, and the inconvenient and awkward situation which it occupied, as the cellular structure at this part is loose, and but little force is required to detach or separate it from a tumour of this kind, and I should therefore always advise you to effect this by an instrument similar to the one which you saw me use—viz., a flatened aneurysmal probe. The use of a knife in operating on these parts is dangerous, from the chance you run of wounding any of the sublingual vessels, which are of a large size, and the little control which you can have over the movements of your patient, for I can safely promise you that you will find few so quiet and tractable as this patient was. After the tumour was removed, the situation it occupied was carefully examined, and finding that the whole of the cyst had been removed, and that there was no hemorrhage from the part, I ordered her to rinse her mouth out frequently with warm water, and to take a pill of calomel and antimony at night, and a senna draught on the following morning, and at her very urgent request I allowed her to return home to her friends in the neighbourhood of Coldbath-fields.

Thus much of this case, gentlemen, you were most of you enabled to witness, and I regret the more that I could not prevail upon the patient to remain for a few days in the house, as it is during that period that the most important part of the treatment in such a case as this is called for.

* On examining the tumour previous to its being placed in the Museum in Grosvenor-place, we found the above remarks fully verified.—*Rep. L.*

Twelve hours after the operation she was attacked with great difficulty of breathing and deglutition, which continued unabated until I saw her on the following day, about twenty-four hours after the operation. I found her tongue enormously swollen, rendering it impossible for me to examine the throat. Every attempt which she made to swallow produced symptoms approaching those of strangulation, her face was flushed and turgid; skin hot and parched; pulse 120, rapid and thready; and the countenance expressive of the greatest anxiety. Now, with symptoms such as these it may frequently be requisite, in full, strong, and plethoric persons, to abstract blood largely from the system, and produce a decided impression at once, but in more delicate subjects topical bleeding will be found quite sufficient to answer this purpose; but even this you must do effectually, and check the inflammatory action at once. Twenty-four leeches were ordered to be applied to the throat, followed by a linseed-meal cataplasm; six grains of calomel and five grains of James's powder were administered immediately, and were followed in four hours by a strong senna draught. The leeches were re-applied on the following morning, for although the painful sensation of suffocation about the throat was materially relieved, there still remained sufficient difficulty in deglutition and respiration to render their re-application a matter of prudence. She took the infusion of roses with sulphate of magnesia and diluted sulphuric acid every six hours, for a few days, when she continued to go on without any further let or hindrance to her perfect recovery.

The Symptoms which sometimes follow an Operation on Parts near the Throat,

where there is required any force or violence to separate the morbid from the healthy structures, are frequently of a distressing, and sometimes of an alarming character, and the consequent restorative inflammation, if I may use the term, which is naturally set up in the part for the reparation of the injury, frequently affects the surrounding important organs of respiration and deglutition, in the manner which I have already described to you occurred in this case; the same symptoms occurred in the patient M'Donald, after I had removed the tumour, situated externally, near the region of the parotid gland, and dipping downwards and forwards under the angle of the jaw; but they were speedily and effectually relieved by the same means being employed as above detailed. In the treatment of these cases you must be active at the onset, and attack them vigorously; you must not be satisfied with putting on six or eight leeches, but you must apply a couple of dozen, and repeat the application of them very soon, if you do not find the symptoms speedily and completely relieved; and, as I before told you, if your patient be young, vigorous, and plethoric, you may, with great safety and relief to him, take a large quantity of blood in a full stream from the arm, and afterwards keep up the depleting effect, by the abstraction of blood locally, bearing always in your mind the due importance of those organs in the animal economy which are to be thus preserved and kept free from inflammatory action.

The Disease in the present Case

(Holloway's) did not partake of the ordinary character which is usually obtained by the sublingual tumour denominated ranula, but came more properly and particularly under that class of tumours which is denominated encysted. It was unconnected with the sublingual duct, and was situated in the loose cellular tissue beneath the tongue. It is not very uncommon to meet with encysted tumours occupying this situation, the cyst, however, is generally found to be very thin and attenuated, and the contents are most commonly of an albuminous glairy character, resembling the white of an egg. Encysted tumours of this nature are frequently met with in other parts of the body; I have removed them from the labium pudendi, and from the inner surface of the lips; they seem to occur and form under surfaces covered by mucous membrane, and where glandular apparatus abounds, more frequently than in other parts. They seldom admit of removal by dissection, from the extreme delicacy of their texture, this circumstance rendering it very difficult, and almost impossible, to separate them from the surrounding parts without leaving some portion of the cyst behind; and when this happens, you may be pretty sure and certain that the disease will return again. The method of proceeding where extirpation is impracticable is the following; you must proceed in the first steps of the operation as I have already explained to you;—freely divide the mucous membrane of the mouth and the cyst itself, empty the cavity of all its contents, and allow all bleeding to cease. Then wipe out the cavity with a piece of lint, and rub over the whole of its inner cavity with a piece of caustic potash, so as completely and entirely to destroy the whole cyst. After this is done, you may if you please wash out the patient's mouth with some vinegar, which, by decomposing the caustic, will check its further action on the surrounding parts. The slough of the cyst will separate in a few days, granulations will spring up from the bottom of the cavity, cicatrization will take place, and the cure will be thus effected.

I will now detain you a few minutes by explaining to you the

Course, Nature, and Treatment of Ranula,

that disease I mean which is more commonly

denominated "ranula." This, like the encysted tumour, generally occupies some part of the cellular space under the tongue and between the rami of the lower jaw; it is gradual in its growth, and has a semi-transparent appearance. The origin of this disease can be dated from obliteration of the common orifice of the sublingual and submaxillary ducts; the discharge of saliva is thus checked and prevented, and there is a consequent accumulation in the duct, the secretion becomes inspissated, and mixed with the mucus poured out by the lining membrane of the canal, and in this way a tumour, sometimes of considerable magnitude, is produced. When it is practicable, some authors have recommended the introduction of a small probe into the mouth of the duct, and treat the constricted orifice by gradual dilatation, as in the cases of strictures of other mucous canals. In this way I have known the distended cavity to have become emptied, and a free exit established for the subsequent secretion of mucus to escape. When the orifice of the duct cannot, however, be re-established in this manner, the treatment of it by caustic potash is the best; or, if the tumour be a very large one, the excision of a portion of the mucous membrane, with the parietes of the cyst, may be substituted for simple incision. This is the method which I should advise you to adopt, but other plans besides these have been recommended. The nitrate of silver has been proposed, and will, I have no doubt, often succeed; its object is precisely the same as that of the caustic potash, that of destroying the cyst, but in this respect I rather believe that it is less to be depended upon than the kali purum. There is another mode of treatment which is sometimes adopted in these cases; it is one, however, which I feel it to be my duty strongly to caution you against—it is the introduction of a seton. A skein of silk, or part of one, is drawn through the substance of the tumour, and tied in a knot closely under the tongue. The object of this method of treatment is manifest; it is that of producing inflammation and consequent obliteration of the cyst. This is a very nasty mode of proceeding, independent of its being a very dangerous and inefficient one; I have seen it productive of great inflammation in all the surrounding parts, and attended with the severe symptoms which I enumerated to you in a former part of this lecture as occurring in this case, and I have never seen it cure the disease. The degree of feverish excitement and general disturbance of the whole system which I have seen attend this mode of treatment, would prevent my ever having recourse to it.

Besides the accumulation of saliva,

Earthy Deposits in the Salivary Ducts

under the tongue, principally formed of the phosphate of lime, are often met with; they seldom produce any inconvenience, nor do they interrupt the flow of saliva, and perhaps they are not discovered until they become inconvenient from their size and magnitude in the mouth. I have removed several, and one a short time since from a girl who presented herself among the out-patients. This was of a larger size than any which has previously fallen under my notice, it was about the size of a horse-bean. There is of course no reason why they should not attain a much greater size than this. They may be removed by a very simple process. You have nothing to do but to divide the membrane of the duct with the point of a lancet, and you can then easily dislodge the calculus by means of the edged extremity of a probe; it will generally escape without any assistance, after the division of the parts. It, however, sometimes happens that the presence of a calculus in the ductus Whartoniensis is productive of considerable inconvenience to the patient, and escapes from the duct without operation. This occurred in a case (the preparation of which I now show you) which was given me by a friend some short time since with the following history. The patient had suffered for several years from pain and uneasiness at the inferior surface of the tongue, and from a painful spasmodic affection of the miglo-hyoideus muscle, the stone was discharged during the night from the duct, and all her former painful sensations immediately left her.

ON THE

LAWS OF SICKNESS,

ACCORDING TO AGE,

EXHIBITING A DOUBLE COINCIDENCE BETWEEN THE LAWS OF SICKNESS AND THE LAWS OF MORTALITY.

By T. R. Edmonds, Esq., *late of Trinity College, Cambridge.*

The law of mortality of any population, consists in the expression, for successive ages of life, of the number dying out of a given number living. Similarly, the law of sickness will express the number constantly sick at any age, out of a given number living at that age. The law of sickness, as will presently be seen, admits of a simple and precise definition; but it does not immediately inform us how many individuals at a given age are yearly attacked by sickness. This law has regard to the duration, and not to the number of cases of sickness suffered by a given number of individuals.

There have been published only two

observations on the law of sickness,—one from returns collected by the "Highland Society of Scotland," the other from returns recently collected and just published by the "Society for the Diffusion of Useful Knowledge." In the former, 85,000 years of life, in the latter, 24,000 years of life have been observed. The period of life observed, extended from the age of 20 to the age of 80 years; but for ages above 60, the results are not deserving of much confidence. In both observations, the quantity of sickness suffered by a given number living, increases with the age according to the same rate. *This rate of increase is identical with the rate of increase in the mortality according to age;* and is expressible by the number or "constant" which I have used in the construction of all my theoretical tables of mortality, between the ages of 15 and 55 years. According to this new theory, the mortality at any year of age, exceeds that of the preceding year by 3(2.991) per cent; which is the same as saying that the mortality during any decennial interval of age, exceeds that of the preceding decennial interval by one-third-part (34.3 per cent.); or that the mortality doubles in 23¼ years.

I now subjoin a table of the relative and absolute sickness at each age, as experienced in the Scottish and English benefit societies, together with the relative results according to theory. The absolute numbers for England have been extracted from an article in the *British Medical Almanack* for 1836, from the pen of the editor of that valuable work. The relative may be converted into the absolute numbers by using the common multipliers appended.

	Relative Sickness and Death.					Absolute number constantly Sick, & dying annually, out of 100 living.			
Between Ages	20-30	30-40	40-50	50-60	Common Multiplier	20-30	30-40	40-50	50-60
Sickness { Scotland	.57	.67	1.00	1.83	1.97	1.13	1.32	1.97	3.60
Sickness { England	.60	.71	1.00	1.69	2.56	1.54	1.83	2.56	4.32
Deaths ... England	.51	.78	1.00	1.61	1.85	.95	1.45	1.85	2.98
Theory	.55	.74	1.00	1.43	—	—	—	—	—

On inspection of the above table of *relative* sickness and death, it will be perceived that for the three decennial intervals of age from 20 to 50, the coincidence between the theory and the observed facts is nearly perfect. Between the ages of 50 and 60 years there is an apparent, but no real opposition. For according to the theory of mortality, a new rate of increase begins, or a new constant comes into operation at some variable age between 50 and 60 years. The above theoretical numbers are founded upon the assumption that the new constant comes into operation at the age of 55 complete years. If an earlier age (say 53) had been adopted, the theoretical numbers would have agreed with the facts for England. In the case of Scotland, we have no information respecting the contemporaneous rate of mortality. In England, the elevated ratio of sickness between 50 and 60 years, coincides with the elevated ratio of mortality at the same age. The establishment of this coincidence between the law of sickness and the law of mortality is the main object of the present remarks.

The fact being acknowledged, that the sickness suffered by a given number living, increases with the age, according to the same law which regulates the increase of mortality, it necessarily follows—that there exists a fixed proportion at every age between the quantity of sickness and the number of deaths. If there are two years of sickness to every death at any one age, the same proportion holds good for every age; at least between the observed limits of 20 and 60 years. According to the observation just made on English benefit societies, the constant proportion is that of one year and a half of sickness to each death at every age. From my own experience, I am inclined to the opinion, that two years of sickness to each death, is the proportion most generally prevalent. In the present inquiry, the exact amount of this proportion is a question of no importance; it is sufficient to know, that all observations (including a third unpublished extensive observation of mine) agree in showing this proportion to be constant at all ages.

Adopting as true the simple proportion of two years of sickness to each death, we obtain the following interesting consequences. If out of 100 living at any age, 4 are constantly sick, then it may be assumed as a fact, that the annual deaths will be two in number; and reversely. If at any age, the proportion of sickness to each individual, amounts to the 25th part of a year, the mortality in one year will amount to one in *fifty*. If at any age, the mortality

in one year is represented by *one* per cent of the living, the sickness due to each individual will be *one week*, which is nearly *two* hundredth parts of a year. The reader may easily trace similar consequences from adopting any other constant proportion than that of two years to each death.

Four years ago, I published some tables of health insurance, founded upon the principles above explained. The observation of the "Highland Society" was at that time the only one extant, on which the graduation of sickness according to age could be founded. I considered that great confidence might be reposed on the correctness of the relative results obtained from this observation, more especially as they were in harmony with the theory of mortality. But I entertained strong suspicions as to the correctness of the absolute results; and I felt persuaded, that the absolute sickness therein expressed, was very much less than that generally prevalent in England. In my published health tables, the scale of relation is that exhibited by the English and Scottish observations, or rather is that of the theory with which they so nearly coincide. But I have adopted for the base of my tables, a number which is more than 50 per cent greater than that of the table of the "Highland Society," and 20 per cent greater than that indicated by the English observation just published. The additional experience which I have since acquired, has served to confirm the opinion which I first hazarded respecting the *absolute* sickness most generally suffered by the English population. The results of my theoretical tables do not substantially differ from the results of Dr. Price's tables of sickness, which have been in universal use for fifty years. But every two successive numbers in my tables, bear the exact same relation to each other, which is not the case in Dr. Price's tables.

All my tables of life and health insurance may easily be distinguished from the tables of any other person by the "constant" connecting together any two successive numbers. For example, at page 28 of my "Life Tables," I have given the values at every age, of a life insurance of £100 for one year, deduced from the table of "Village Mortality," which is a theoretical table founded on Dr. Heysham's observation at Carlisle. At the ages of 20 and 21, the values are .6529 and .6724 respectively; at the ages of 30 and 31, the values are .8757, and .9018 respectively. The reader will easily perceive that the excess in each case is measured by the constant 2.99 per cent. Under the age of 55, for every ten years increase of age, the "Premiums for one year" increase *one third* part, very nearly.*

ON THE MORTALITY AT EACH AGE OUT OF A GIVEN NUMBER OF CASES OF SICKNESS.

Within the last few days, I have met with an extensive observation lately published by Dr. Southwood Smith, Physician to the *London Fever Hospital*, which brings the new theory of mortality, and the chief of its three constants, in close apposition with therapeutics and the practice of medicine. By means of this theory, when the number dying out of a given number living is known

* The reader may learn with some surprise that this new theory of mortality has been already extensively applied to practice, and has served as the basis of pecuniary engagements of great magnitude. For more than six years this theory has been the regulator of all the published lists of prices offered by a London Life Insurance Company, as may be seen by the annexed comparative table. The numbers in the first and second columns are in the exact proportion of 6 to 5 to the original numbers in the third and fourth columns:—

Age.	Annual Premium for Insurance of 100*l.* according to			
	The Advertisements in 1839, and the Prospectus in 1836, of the same Life Office.		My Theoretical Table B 24, published in 1832.	
	For One Year.	For Life.	For One Year.	For Life.
	£ s. d.	£ s. d.	£	£
20	0 15 8	1 11 9	.6529	1.3222
30	1 1 0	2 2 0	.8757	1.7493
40	1 8 2	2 17 1	1.1741	2.3776
50	1 17 9	4 2 0	1.5731	3.4159
60	3 5 4	6 10 9	2.7225	5.4459
70	6 18 4	10 18 6	5.7655	9.1041

at any one age, the mortality at every age of life is also known. By means of the same theory, as I have proved above, the relative quantity of sickness suffered at each age of life is also known. The constant of mortality is identical with the constant of sickness; the same number which measures the increase of mortality according to age, measures also the increase in the quantity of sickness suffered by a given number of individuals. The new observation proves that the *same constant, in the case of fever, measures the increase of deaths according to age, out of a given number attacked.* It appears in the highest degree improbable, that this number, of all others, should regulate the mortality in fevers, without being at the same time applicable to other extensive classes of disease. The materials for the decision of this question abound or ought to abound in all public hospitals.

The observation of Dr. Smith is founded upon 6000 cases of fever occurring during the ten years ending in January, 1834. I subjoin the results in the form in which they have been published. I have added for comparison a column containing the numbers resulting from the theory, or from an increase of one third part (34.3 per cent) for every ten years increase of age.

Between Ages	Out of 100 attacked by Fever, there die according to	
	Fact.	Theory.
5—16	8.3	—
15—26	11.5	12.5
25—36	17.1	16.8
35—46	22.0	22.6
45—56	30.5	30.3
55—66	40.7	40.7
Above 65	44.6	—

The coincidence between the facts and the theory is sufficiently close to prove all that is required. The small existing variations might have appeared, even if the coincidence had been perfect at intervals of five years of age. The theoretical numbers are founded on the assumption that the cases were equably distributed over each decennial interval of age, of which no evidence is presented. Dr. Smith has omitted to state the absolute numbers at each age on which his results are founded. The facts were probably very deficient in number at the beginning and at the end of his table; so that the results here are entitled to little confidence. The information would have been complete if he had given his materials distributed in quinquennial gradations of age. In the column of ages Dr. Smith has adopted an erroneous form of expression; instead of "between the ages of 15 and 26," he evidently intended to say, between the ages of 15 and 25 complete years, which is the form generally adopted.

If it be admitted that the aggregate of severe diseases resemble fevers in their fatality according to age, we are led to the following novel but inevitable conclusions, applicable between the limits of 15 and 60 years of age. That *a given number living at every year of age suffer the same number of attacks of sickness;* and that *the duration of each case of sickness at any age, is proportional to the mortality at that age.* The deaths out of a given number living, vary with the age, in precisely the same degree as the deaths out of a given number attacked; consequently, the proportion between the number living and the number attacked is constant. The proportion of sickness (in duration) to the number of deaths has been proved to be constant at every age. And since the number of cases of sickness (out of a given number living) at each age is constant, the average duration of each case must be proportional to the number of deaths out of a given number living, that is, to the mortality. Assuming that one tenth part of the living at every age are yearly attacked by sickness, the facts above announced may be thus illustrated. If 1000 living at the age of 20 suffer 100 attacks of sickness, 10 deaths and 1000 weeks of sickness; then 1000 living at the age of 43, will suffer 100 attacks of sickness, 20 deaths, and 2000 weeks of sickness.

If it be confirmed by future observation, that diseases in general are subject to the same law as fevers, the knowledge of the new theory of mortality will form an indispensable branch of medical education. (This theory has been explained and applied in Nos. 605, 614, 640, 641, and 648 of THE LANCET.) Without this knowledge it will be impossible for a medical man to form any correct idea of the value of different remedies, when his patients differ in age. This theory will inform him that if he loses by death double the proportion of patients at the age of 43 than at the age of 20, the effect of his remedies in each case is the same.

46, Regent-square, London;
13th Feb., 1836.

HOPITAL DES ENFANS MALADES, PARIS.

RESEARCHES INTO THE DISEASES OF CHILDREN,

CONDUCTED ON THE

KNOWN PRINCIPLES OF ANATOMY AND PATHOLOGY.

TYPHUS FEVER IN THE YOUNG.

The disease which French physicians are in the habit of describing under the various names of "typhus fever," "follicular enteritis," "dothinenteritis," "intestinal exanthema," has hitherto been observed with care in the adult subject only. The facts on which the works of ANDRAL, LOUIS, CHOMEL, and others, on this affection, are founded, were exclusively collected in hospitals dedicated to the reception of adults. For many years, however, M. GUERSENT, during the course of his lectures, has been accustomed to point out the existence of this disease amongst children, and the researches which we have ourselves made, leave no doubt on our minds but that typhus fever occurs very frequently after the age of ten years. It may, we know, even occur so early as at four years of age, but we have never observed an example below the latter age, although we have examined more than 200 subjects, aged from twelve months to three years old.

The symptoms which characterize typhus fever in children, are nearly the same as those which are observed in adults. There are, however, in the former some peculiarities which depend on the age of the subject, and which we propose to illustrate in the following cases. We would also call attention to the points of resemblance which this disease is supposed to have with certain anomalous cases of hydrocephalus. For our own part, with all due respect to the opinion of some distinguished writers and practitioners, we must confess that we have never seen a case of typhus fever, however severe, which could be confounded with the symptoms of acute meningitis, or hydrocephalus. The distinctive characters of the two last-mentioned affections have always been so clearly marked as not to give rise to the least embarrassment or hesitation in the mind of the physician. Once indeed (and we shall report the case at length) we saw a boy labouring under inflammation of the brain, in its most acute form. The physician diagnosticated *typhus fever*, and the error was not discovered before two or three days had elapsed, but here Mons. G. was led astray by a false history of the case, which he did not examine or in any way regard. The slightest examination of the patient would have been sufficient to reveal the true nature of a disease which was so little obscure as to be diagnosticated by the nurse.

The treatment pursued by the physicians of the hospital *Des Enfans* varies. Messieurs GUERSENT and JADELOT still continue BROUSSAIS' method, and employ sanguineous emissions. M. BAUDELOCQUE prefers the purgative method, by Seltzer water in particular. Blisters to the legs and thighs are very frequently had recourse to, and bark is occasionally given, either by the mouth or in lavement, in the adynamic form. In cases of ataxic fever, baths, with cold effusion on the head, are a favourite remedy in the hospital.

CASE 1.—Louis Haquelle, 9 years of age, of a lymphatic temperament, hair light-coloured, skin white, &c., generally enjoys good health. He has been in Paris only five months, and lives with his mother and brother in a small chamber, ill ventilated, and unwholesome. On the 1st of September, without any known cause, he experienced a sensation of uncomfortableness, with loss of appetite and headache. These symptoms persist during the four days that follow: however, the child continues to go to school, but on the 5th he is seized with continued fever, excessive headache, accompanied by ringing in the ears, complete anorexia. The child was now confined to bed, and placed upon diet. On the 6th an abundant epistaxis. On the 8th the patient was received into the hospital.

On the 9th we examined the boy for the first time, and observed the following circumstances:—Position of the child is relaxed, he lies on his back; great prostration of force; immobility of the countenance; face pale; answers slowly, but correcty, if the attention of the patient be fixed by any particular question; frontal headache; ringing in the ears very troublesome; the lips are dry, and covered with a crust; the tongue red, smooth, and dry; thirst very great; no vomiting or nausea; the abdomen is sonorous on percussion, and tender when pressed upon, especially about the umbilical region; no stools since his reception into the hospital. We do not observe any rose-spots; skin warm and dry; pulse 108; inspirations 36; cough pretty frequent; the sonority of

the chest is normal. We hear a mucous rale on both sides.—*Acidulated water* (*oxymel*) *2 jugs; 8 leeches round the umbilicus; emollient cataplasm to the leech-bites; lavement; diet.*

In the evening, exacerbation of the febrile movement; delirium, which continues during the night.

10. The agitation of the night previous has been followed by a deep prostration; somnolence; stupor; eyelids closed; the force and frequency of the pulse have fallen; pulse 96. The leeches have drawn a great quantity of blood; no active treatment is employed.

11. The evening and night have been found in a still higher degree of agitation; the patient left his bed several times, and it was necessary to employ the strait-waistcoat; in the morning, alternations of agitation and prostration; the child cries whenever the hand is applied to the abdomen, or any other point of the skin; two stools, one very liquid; we now perceive some lenticular rose-spots on the abdomen; the cough persists; pulse 112; respiration 36. *Remedies the same as before, except leeches.*

12. No remarkable change worthy of notice.

13. During the night a very abundant epistaxis, followed by excessive prostration. On the 14th, we find the patient still delirious at the morning visit; he is excessively agitated, and cries out constantly; it is with difficulty that we can count the pulse, which is 132; venesection was immediately practised at the arm, and about five ounces of blood taken away; the clot is soft; no trace of inflammatory crust.

15 and 16. The ataxo-adynamic symptoms are more prominent; the patient does not answer a single question, and is unable to recognise his mother. The lips are cracked, and furnish a sanguineous exudation; the tongue is dry, like a bit of parchment; pulse excessively feeble, varies from 112 to 120; temperature of the skin not much elevated; one liquid stool a day; the abdomen is tympanitic. *Tepid bath, with cold affusion on the head; four ounces of an emollient draught; sinapisms to the legs.*

17 and 18. The same remedies are continued. The patient is pretty calm; he answers some few questions, and does not seem to suffer any pain. Still the tongue continues dry and dirty, and the pulse frequent; the child has no diarrhœa.

20. The patient lies nearly in a state of coma; the eye is fixed and dull; the eyelids half open; the pupils dilated, but contractile; he does not answer when spoken to; emission of urine involuntary. The tongue and teeth covered with a dark crust; deglutition difficult; sensibility of the skin is now obtuse; pulse 118, small, irregular. *A blister to each leg.*

21. The stupor persists; the pupils are now nearly immoveable. *A lavement of bark is ordered; two blisters to the legs.*

22. Tumefaction of the left parotid; somnolence as before; prostration the same; excretions involuntary. *Poultice to the tumour.*

24. The face is of a yellow leaden colour; complete loss of consciousness; the patient utters a few feeble cries when he is changed in bed; excoriations on both thighs, on the sacrum, and over the right elbow; the arms are raised up from time to time; the extremities are cold; pulse weak and very compressible, 112. *Ether Draught; Lavement of Bark.*

From the 28th of September to the 2nd of October (the day of the patient's death), gangrenous eschars were formed on both thighs, and on the elbow, as also at the points to which the blisters had been applied. The leech-bites have become the seat of deep ulceration. The tumefaction of the left parotid has subsided, but a purulent fluid is discharged from the ears; the pulse remains feeble and compressible; the skin almost cold. The patient remains in a state of absolute silence, though on the 29th he seemed to recognise his mother. The diarrhœa is abundant, and the stools involuntary.

The wounds are dressed with a pommade containing bark; the ether draught is continued: a lavement of quinine given, and a few spoonfuls of claret wine by the mouth.

The patient died on the 2nd of October, in the most extreme degree of marasmus &c.

Examination of the Body Eighteen Hours after Death.

The body is extremely emaciated; large superficial ulcerations occupy the right elbow and both thighs. There are a few large sudamina on the anterior surface of the chest; cadaveric rigidity very well marked.

Skull.—Dura mater normal. The occipital fossa contains about two spoonfuls of fluid and clear serum. The arachnoid every where presents its normal colour, and is easily separated from the subjacent parts. The pia mater offers no other change than a slight serous infiltration; the substance of the cerebral hemisphere is moderately injected; when divided into three slices, we find no trace of ramollissement or other morbid change. The central parts offer their normal colour and consistency. The cerebellum is more pale and more firm than the cerebrum. The pons varolii normal.

Chest.—The larynx, trachea, and bronchi, are pale, and lined with mucus; the bronchial glands normal; the two lungs are pale anteriorly. The base of the right lung is united to the diaphragm by a pseudo-membranous exudation; in the upper part of the lung we find a portion, about the size of an ap-

ple, which has passed to a state of gray hepatization; the two other lobes are healthy; they contain but little blood; the left superior lobe is partially softened, the inferior lobe normal. The heart is pale and flaccid, of a natural volume; pericardium healthy. The lining membrane of the aorta does not present any change of colour.

Abdomen.—The anterior wall of the stomach (internally) offers a patchy injection: the remainder of the mucous membrane is pale, and of normal consistency: the duodenum is tinged with bile; the jejunum and two upper thirds of the ileum are pale; in the inferior third of the latter intestine we observe no less than twenty-seven ulcerations, occupying indistinctively the glandulæ agminatæ and segregatæ; these ulcerations are superficial, and merely involve the mucous tissue, which is soft and injected for the extent of about twelve inches near the cæcum; the ileo-cæcal valve is riddled with ulcerations; the mucous lining of the cæcum presents a livid colour, and is remarkably thickened; the glandulæ segregatæ of the colon are very apparent, and marked in the centre by a dark point; in the intervals the mucous membrane is pale and of good consistency; the mesenteric ganglia are not more developed than in the normal state; two or three are of a livid colour, and rather hardened than softened; the spleen, which offers its ordinary volume, is a little less firm than natural.

Case 2.—François Chevalier, 4 years of age, was carried to the hospital Des Enfans Malades, on the 5th of November: the persons by whom he was conducted inform us that the child, who was convalescent from the hooping-cough only a few days, while on the route from St. Omer to Paris, was seized with vomiting, diarrhœa, and fever; these two latter symptoms persisted for five days following the attack, and on the evening of the fifth day were accompanied by prostration and some convulsive movements.

7th. Position variable; alternations of prostration and of agitation; stupor; low cries now and then; the child does not answer; the eyelids are half open, and the pupils are normally dilated; the sensibility of the skin is not changed; the lips are dry and cracked; the tongue dry and red; the thirst excessive; the abdomen tender and tympanitic, painful every where on pressure; we do not observe any of the lenticular rose-spots; stools frequent and involuntary; skin warm and dry; pulse very quick, about 140; cough rare, accompanied with a râle sibilant at both sides of the chest. *Gum draught; sinapisms to the legs; diet.*

The same symptoms persist during the days of the 7th and 8th; we cannot observe any convulsive movement, or change in the cutaneous sensibility; the child does not recognise his parents who come to see him, and continues to utter low cries from time to time; the sense of hearing is obtuse, and that of sight seems perverted. The evacuations are still frequent and involuntary. The pulse varies between 136 and 140. On the night of the 8th the child fell from his bed in an access of delirium; in the morning we find the right cheek blue and excessively tumefied; the lips and gums furnish a sanguineous exudation; the tongue is very foul and dark; the pulse is even quicker than yesterday; we count 160 pulsations; the tympanitis and diarrhœa persist. The little patient sank in the evening of the 9th in a state of stupor.

Post-mortem Examination.

Skull.—The vessels which run along the surface of the brain are evidently injected. The arachnoid membrane retains its normal transparency, and is easily detached from the convolutions, the sub-arachnoid cellular tissue is very slightly infiltrated with serum; the pia mater does not contain any granulations or purulent secretion. Three ounces of serum at the base of the skull; one ounce in the ventricles; the cerebral substance itself is quite free from injection. No trace of tubercles or ramollissement.

Neck and Chest.—Larynx and trachea normal. The bronchial tubes are gorged with mucus. The right lung adheres to the parietes of the chest for an extent of about two square inches. We observe a few gray demi-transparent granulations underneath the pleura covering the lungs. Both these latter organs are congested in the posterior part: the bronchial glands contain tubercular matter.

Abdomen.—The mesenteric glands are a little augmented in volume, of a rosy colour. The spleen is enlarged, but its consistence is normal. Liver healthy. The interior of the stomach is marked by numerous folds, whose edges are red. The mucous membrane, however, is free from softening; the membrane lining the interior of the duodenum is remarkably pale; the same decoloration exists in the jejunum and in two-thirds of the ileum; the glandulæ segregatæ are here very much developed. In the inferior third of the ileum, we count about twenty groups of an oval form, injected and prominent; three, placed near the ileo-cæcal valve, are ulcerated partially. The membrane lining the great intestines is furnished with a great number of follicles not ulcerated, but presenting a moderate degree of injection and slight diminution of consistence.

We will add some other cases, and attach to them some remarks in our next number.

CASE OF

ANEURYSMAL TUMOUR IN THE ORBIT

SUPERVENING INJURY OF THE HEAD, AND TREATED BY

LIGATURE OF THE COMMON CAROTID.

To the Editor of THE LANCET.

SIR,—I should feel obliged by the insertion of the following case in your publication. If not too long, I think you will consider it sufficiently interesting. Having omitted all details of treatment, which was that usually pursued in similar cases, and having confined myself to an account of the principal occurrences, I am not aware that the history could be advantageously curtailed. I have the honour to be, Sir, your obedient servant,

GEORGE BUSK,
Surgeon to the Seaman's Hospital.

H.M.S. Dreadnought, Feb. 19, 1836.

Richard Simmons, aged 20, a seaman, was admitted, July 13, 1835, labouring under the usual symptoms of concussion of the brain, with very considerable hemorrhage from the right ear, and a small wound behind the left. It was stated that he had received a very severe blow on the right side of the head, from the gaff of the vessel to which he belonged, by which he was rendered immediately insensible, and he was nearly so on admission, and could with difficulty be roused. At first he was very pale and cold, but in an hour or two he rallied. The hemorrhage from the right ear continued all night. On the following day he was quite sensible, but appeared dull, not complaining of any pain; pupils natural. On the 15th he was still dull, and completely deaf in the right ear. The eyelids, and the integuments around the left orbit, were swollen, apparently from serous effusion; they were not discoloured or painful. The pupil of the left eye was dilated and fixed, vision however was unimpaired, but he was unable to move the globe of the eye in any direction, and had slight paralysis of the facial muscles on the left side.

On the 18th some increase of inflammatory symptoms required attention, but was readily subdued. The pupil was observed to have become irregular, the irregularity consisting in an elongation downwards, and vision was not quite clear; there was occasionally a very partial rotatory motion of the globe, as if caused by the apparently involuntary motion of the superior oblique muscle. He had some headache, confined principally to the left side.

On the 21st his mouth became slightly affected by mercury. On the 24th the headache was very trifling, but the left side of the face had become numb, and felt very "uncomfortable;" he complained of great dryness in the mouth, although his tongue was quite moist; there was also considerable purulent discharge from the right ear.

On the 25th the integuments of the left side of the face and head, extending to the vertex, were extremely tender to the touch, but without any morbid appearance. The paralysis continued unaltered on the 28th, the conjunctiva of the left eye was much inflamed, and swollen from œdematous effusion, and on the 31st purulent matter was deposited between the laminæ of the cornea, at the lower part, with nebular opacity, but the eye was much less painful, and the headache gone; his health was now in most respects restored, and the functions were properly performed.

He began soon to complain of curious noises in the right ear, from which the discharge continued, and he was very deaf. The eye was not painful but the onyx was increased. In the beginning of September the paralysis and loss of sensibility were complete. The anterior laminæ of the cornea had given way, and a deep ulcer occupied the site of the abscess, of a healthy character. No change of importance took place until about the 20th of November, when he became affected with small-pox, and was sent to the Small-Pox Hospital, whence he returned on the

1st of December. On his readmission the state of the face unaltered; the eye generally was prominent and much inflamed, the ulcer on the cornea was large and in a very irritable state. The severity of these symptoms was soon pretty well subdued, and attempts were made by counter-irritation in every form, and other means, to remove the palsy of the face, without effect. Sensibility in some measure returned, preceded by anomalous painful feelings in the affected integuments. He continued in this state without any change in symptoms or appearance, except that the eye seemed to protrude rather more from the orbit than had been previously observed. The ulcer on the cornea filled up.

His general health being quite restored, and medical treatment not appearing to have any effect on the local complaint, he was desirous and recommended to go to his friends in the country and trust to the efforts of nature. However, on the 1st of February, on making examination of the eye, I felt on pressing the globe a distinct pulsation, and, farther, found, deeply situated in the upper and inner part of the orbit, a firm pulsating tumour, which appeared about half an inch in its transverse and longest diameter; it was situated between the levator of the eyelid and the bone, and did not show itself externally, but when the

eyelid was raised, it caused some projection of the loose conjunctiva.

The pulsation of the tumour was accompanied by a very distinct whirr, which could also be felt on pressing the parts in its immediate neighbourhood. Through the stethoscope a very loud aneurysmal whizzing sound was communicated, which could also be heard in applying the instrument over the inner canthus of the other eye, and on the left side of the frontal bone as high as the roots of the hair, and nearly as far back as the ear. He has very loud noises in the head in the right ear, resembling the sound of church bells, and in the left like the breaking of waves on the sea shore. He complains more of these incessant noises than of anything else.

Operation.—As pressure on the left common carotid put a stop to the pulsation and sound of the aneurysm, and to the noises in the head, it appeared to me that the placing of a ligature on that vessel presented ground for hope, and perhaps the only hope, of affording him relief or even permanent cure. As a preparatory step, he being very well able to afford the loss, twenty ounces of blood were taken in the evening, and, on the next day, February 2nd, the left common carotid was tied. Immediately on tightening the ligature, the pulsation and sound of aneurysm ceased, as also did the internal noises.

In the evening, four hours after the operation, obscure pulsation could be felt in the tumour, which, however, was not so large. The whizzing sound could also be plainly heard with the stethoscope, and over as large an extent. There was no pulsation in the temporal artery. The internal noises were at intervals nearly as loud as before the artery was tied, and at others nearly absent. He felt great pain on swallowing; pulse 110. He took 3ss of *Liquor. Opii Sedativ.*, and a wetted cloth was applied to the forehead and eye.

Feb. 3. In the morning, the pulsation was very obscure, and the sounds much diminished. The internal noises were also much less. He had had no sleep, and complained much of pain on deglutition, and on coughing, and of severe pain in the left hypochondrium. He has also a very troublesome cough, which he has had for some time. Pulse 120, sharpish. He was bled to 16 oz. with immediate relief, and in the evening was much easier in all respects.

4. No remains of the tumour could be felt, and all pulsation was gone from the orbit, nor could any sound be heard with the stethoscope. The internal noises are quite absent, and his hearing is somewhat improved. Pulse 100, soft, skin moist, and tongue clean. The pain had left the left hypochondrium, but he felt some in the right when coughing. The wound was dressed, and the sutures were removed; union had taken place to a great extent. In the evening the cough was occasionally severe, with mucous expectoration, and pain referred to the diaphragm. Pulse 120, soft, skin moist; bowels not opened. He had some calomel and compound extract of colocynth, and a mixture with sulphate of magnesia, and tincture of digitalis, and a linctus for the cough.

5. He felt very comfortable; has had several stools; countenance pale; pulse 100; eye less prominent.

6. Feels weak, but is quite free from pain; cough nearly gone. The conjunctiva is much less vascular than before the operation, and the cornea is clearer. Some grumous blood was discharged from the *left* nostril during the night. Pulse 90.

7. Pulse 80. The lips of the wound are opened, but it is filled with healthy granulations; sleeps well; appetite too good.

11. He sat up several hours, and on the 15th, the ligature came away.

18. The wound is all but cicatrized; he is quite free from pain or uneasiness; feels only hungry and weak; he is not yet allowed meat; pulse 70, soft. No remains of the aneurysm can be detected; the eye is returned wholly to its natural level; the upper half of the cornea is quite clear, the lower is occupied by a dense leucoma, to the centre of which runs a large red vessel from the conjunctiva. That membrane is hardly vascular, and vision is good through the clear part of the cornea when the lid is elevated; the pupil natural. The left side of the face is paralyzed, but sensibility is perfect except on the left side of the nose, where he feels pricking pains when touched. He has no power of motion whatever over the globe of the eye, and is still very deaf, and more so in the left ear than in the right, but has no noise in the head. His intellects have never been affected. Pulsation is very distinct behind the lower portion of the sterno-cleido-mastoid muscle, probably in the subclavian.

If any change of consequence takes place, while the man is under my care, I will take the liberty of communicating the particulars through the medium of this journal.

CASE OF

HEMORRHAGE FROM THE MOUTH.

By Julius Wolff, *M.D., Liverpool.*

A. D., the commander of a vessel, twenty-five years of age, of robust constitution, being in good health, was attacked with a slight hemorrhage issuing from the mouth. In the beginning the saliva was only tinged with blood, but, soon afterwards, pure blood ran out uninterruptedly. Common remedies

were applied, without success. He then sent for his physician, who ordered astringent gargles, still ineffectually. Two days afterwards another physician was consulted, who ordered venesection, astringents to be swallowed, gargarisms, and warm foot-baths. Now and then the hemorrhage stopped for a few hours, but returned again, and so the patient went on for a fortnight.

January the 20th, 1835, at nine o'clock in the evening, I was sent for. I found the patient sitting in bed, his face flushed, and the pulse full, but not very frequent. The blood ran uninterruptedly out of his mouth, and I could not discover the source. The patient did not complain of any uneasiness besides, but was much alarmed at the great and constant loss of blood, and durst not move. I could not trace the hemorrhage to any cause. The patient was of a plethoric habit, and had frequently had bleeding at the nose, which was always difficult to be checked. I ordered a venesection, and a warm foot-bath, and during the bleeding the hemorrhage ceased, the astringent remedies being continued. About an hour afterwards it began again.

I now saw distinctly that the blood came from the roof of the mouth, and from a small spot of the gingiva, near the third lower molar tooth. I proposed to touch the part with nitrate of silver, and to extract the third molar tooth. The former proposal my colleagues accepted, but the latter they objected to. After the application of the nitrate of silver, the bleeding stopped, but a quarter of an hour afterwards it began again. The patient's face was pale, and the pulse small. Other complaints, which generally attend such great losses of blood, were not present.

I was now determined to extract the tooth; but on account of the blood which gathered so rapidly, I could not see the lower set of teeth. I caught a tooth in the region where I suspected the blood to come from, and after I had extracted it, the bleeding stopped. I filled the socket with wax, applied mustard plasters to the soles of the feet, and the before-mentioned medicine was continued.

The patient slept for a few hours, and recovered a little. Eleven hours afterwards the hemorrhage began again. My colleagues had by this time forsaken me, and the case being now left to my sole care, I had him placed in an arm-chair, and applied uninterruptedly every two minutes fresh ice to his cheeks, and let ice melt in his mouth, and soon afterwards the bleeding was checked. The room was kept as cool as possible, and the half-sitting position in the arm-chair and the application of ice were continued. From time to time the warm foot-bath was used. He was put on low diet, and I gave him decoct. crystal. tartar. c. syrup. rib., for a drink. The hemorrhage stopped for thirty-six hours, and then began again with renewed violence. During this time the patient had recovered a little, but began now to complain of giddiness, noise in the ears, and dimness of vision. The pulse was trembling, and the countenance anxious. The last-mentioned remedies were continued. I filled the whole cavity of the mouth with wax in such a manner that the air could only go through the nose, and by means of a bandage which I applied, not the least motion of the jaw was allowed. The nourishment of the patient was beef-tea, with eggs, which was poured with tea-spoons between the lips, and was swallowed very well.

After ceasing for ninety hours, during which time the patient recovered a little, the bleeding began again very severely. I now had recourse to the actual cautery, touching the socket of the tooth, and the whole roof of the mouth, until the bleeding stopped. In twelve hours it began again, but the cautery being repeated thirteen times, it was finally checked. The scab caused by the iron came off after the roof had obtained a new integument.

Mr. D. bore all this with admirable patience, though the frequent return of the hemorrhage dejected him sometimes. It had lasted now, with the interruptions stated, for more than five weeks, the shortest intervals occurring in the first fortnight. The patient was kept during more than six weeks in the half-sitting position in an arm-chair in a cold room, where uninterruptedly the application of the ice and the astringent medicine were continued.

After these six weeks, I allowed him to sleep in his bed again, but in a very cold room, I gave him *acid. sulphur. dilut.*, and, afterwards, *serum lactis alumin.* (consisting of *lactis vaccini*, libram unam, ebulliat in vaso figulino; dein adde *aluminis* drachmam unam; colatura D. S., for a drink); ordered proper diet and rest; afterwards, proper exercise in the open air, and on the eighth week of my treatment Mr. D. visited his friends again, after having been reported frequently to be dead. A few months after he recovered the red bloom of his face.

In such a case I should like to consult a Hahnemanist. What an effect would the 24th dilution of a grain of aconit. napel have produced here? or the quintillionth or the decentillionth part of a grain of nux vomica, arnica montana, ignatia, belladonna, chamomilla, caffea arabica? The diet alone, I think, would have been hahnemanically of the same use as the doses of caffea arab. For in the choice of the diet I was very particular. He took at first water-gruel, pecled barley, cooling drinks, and afterwards beef-tea, with an egg, which, I suppose, could, hahnemanically also, not increase the hemorrhage.

I do not think it improper to add to this

subject the following remarks:—The mother of Mr. D., 62 years of age, of robust constitution, experienced the cessation of menses 6 years ago, but was until that period always regular, and not copious. When young she frequently suffered from hemorrhage of the nose. In the month of February she suffered from a very severe inflammation in her throat. I ordered leeches, but the surgeon refused to apply them. (There is in Germany a lower class of surgeons, who apply leeches, bleed, etc.) When I asked him the reason, he told me that he was "afraid that he might not be able to check the bleeding, because he knew from experience that it was not an easy matter to check a bleeding in this lady. But he did not object to a venesection. He opened a vein, and I applied two leeches on the sternum, in order to convince myself of what the surgeon had stated. The wound of the vein bled for many hours after a bandage was applied, and I was obliged to make a strong compression before the desired effect could be produced. To the leech-bites constant compression, and many other remedies, were applied, yet eight days afterwards a little blood was now and then yielded.

Mr. D.'s sister, about 30 years of age, tall and stout, had had three children, and suffered, when young, frequently from bleeding at the nose. Her menses were regular, and not copious. When brought to bed, her loss of blood was not uncommonly great. She assured me, that a few years ago she cut her finger, and lost such a quantity of blood, that she fainted several times, and the hemorrhage was stopped only with very great difficulty.

Mr. D.'s younger brother, who frequently suffers from hemorrhages of the nose, had a molar tooth extracted. The bleeding was not stopped until the third day arrived, and repeated application of the actual cautery had been made.

Neither Mr. D.'s father, nor his elder brother, was liable to hemorrhages, but this tendency existed in the family of his mother, several of them having suffered from it, one of them a few years ago really dying from hemorrhage. The disposition is therefore inherited from the mother.

94, Duke Street, Feb. 1st, 1836.

REMARKS ON MR. OSBORN'S

ANALYSIS OF BLOOD.

To the Editor of THE LANCET.

SIR,—In THE LANCET for Feb. 20th there is a paper by Mr. Osborn, chemist, of Southamptom, on "Petroleum in the Blood." The alleged detection somewhat surprised me, as petroleum really means a spirit or oil of rock, and was so called because it was distilled from a mineral. Mr. Osborn, however, calls it a peculiar kind of petroleum, but fails, I think, to show that it in the least resembles petroleum in its character and properties. The first test which he made use of was that of touch, the second that of smell; the one was disagreeable, the other adhesive. If this be precision, then indeed chemistry is a superficial science. He next says, "it is soluble in alcohol, and turns of a THICK *brownish white colour*, when well mixed with water. By evaporating the spirit, the tar again floats on the surface." Of what? He does not say, neither does he tell us, whether it is the alcoholic solution of the tar or the tar itself which turns of this strange colour. He says very little else about its chemical and physical properties, except that "it burns like common tar (not like petroleum), leaving a smell not unlike that of burnt feathers." The smell of burning animal matter is much alike in all cases. He then ("the quantity obtained being too small for redistillation) heats a little in a *bulb glass*, to the *temperature of ebullition*, when a *spirit* was given off, which took fire when brought in contact with a lighted taper." What the temperature of "ebullition" is he leaves us in the dark, and how he can call that a "spirit" which might have been a gas (for he never condensed it, even if it were the vapour of a spirit), I am at a loss to determine.

The process made use of is most incompatible with any correct mode of searching for a minute quantity of matter in any body, and at the same time shows a want of knowledge of chemical equivalents which is quite at variance with his title of "chemist." He begins, without any visible object in view, by adding "an ounce of concentrated sulphuric acid to each pound of blood (of which he takes eight pounds) before separation;" which he allows to stand four-and-twenty hours, being frequently stirred; to this he adds for each ounce of sulphuric acid, two ounces of carbonate of lime, but why he was so liberal of chalk does not appear, as equal weights, or at any rate a very slight quantity more in weight of chalk than of acid, would have formed a perfectly neutral salt, forty-nine parts by weight of oil of vitriol uniting with fifty of carbonate of lime, they being as nearly as possible equal weights.

Now as Mr. Osborn was working for proportions, as he afterwards states he was, he appears to me to have gone in a very clumsy way to attain his object: he makes use of "an earthenware retort" (capable, of course, of holding eight pounds of blood) having its beak lengthened with "a *tin tube* three feet long, the extremity of which was introduced into a quart bottle, the *bulb* of the retort into a sand-bath, which was placed in a *charcoal furnace*." When ana-

lyzing for proportions, it is customary to use apparatus of glass to prevent contamination or loss. That Mr. Osborn cannot have had sufficient practice to entitle him to make and publish an analysis of the blood, is, I think, from these statements, apparent; and as far as I am capable of judging, he appears to have obtained nothing but the well-known animal oil of Dippel, as the substance, so far as can be gathered from his description, appears to resemble it in its characters and properties.

I should not have intruded myself on the notice of your readers, but that I have observed lately a great number of persons, attempting an analysis of the blood, who have no pretensions to a scientific or practical knowledge of chemistry. Hoping that this analysis of Mr. Osborn's paper will obtain a place in your valuable and equitable journal, I remain, Sir, your obedient servant. W. C.

Brompton Square;
February 22nd, 1836.

REMARKS

ON

DR. WILLIAMS'S RECLAMATION

RELATIVE TO DR. HOPE'S LATE EXPOSITION

OF THE

SOUNDS OF THE HEART.

To the Editor of THE LANCET.

SIR,—The perusal of some remarks by Dr. Williams on the newly-adopted opinions of Dr. Hope, in the *Medical Gazette* of September 12, 1835, to which my attention has just been directed, has induced me again to request of you the favour of a place in THE LANCET for a few observations on the heart's sounds.

In 1832 I forwarded to THE LANCET a paper containing an explanation of the heart's normal sounds, the correctness of which has been partially, and, I have little doubt, will, sooner or later, be generally adopted. Very similar views had, I have since found, a short time before been advanced by M. Rouanet, at Paris, in an inaugural thesis, and, previously to this, brought forward by Dr. Billing, when President of the *Hunterian Society*, in a paper read at the annual meeting of that Society in 1832.

These views were then new, and opposed to the opinions of all other writers on this subject. The views of M. Rouanet and myself with regard to the heart's *second* sound, have been quoted and adopted by Drs. Hope and Williams. The explanation of the *first* sound, however, as given by M. Rouanet, has been adopted by Dr. Hope with an important *modification*, which modification Dr. Williams asserts, in the paper above mentioned, is nothing more nor less than his own original explanation, first published in his work on diseases of the chest in 1828; and to establish the point in favour of his former view, that the heart's sounds were muscular sounds, Dr. Williams makes, amongst others, the following remarks:—

"Dr. Hope, in his work published in 1832, ascribed both the first and the second sounds of the heart to the collision of the particles of fluid; and, until the publication of the "Appendix" in April last, he had not, in his several writings on the subject, expressed any distrust or qualification of his original opinion."—(These views, be it remembered, were, at one time, adopted by Dr. Williams, but they met with a complete and *unanswered refutation* by me, in a paper in THE LANCET of Sept. 23rd, 1833.)—Dr. Williams continues,—"Here, however, he comes to the conclusion that the second sound is caused by the closure of the sigmoid valves, and that the first is compound, 'consisting, first, *possibly*, of a degree of valvular sound: secondly, of a loud smart sound, produced by the abstract act of sudden jerking extension of the muscular walls, in the same way that such a sound is produced by similar extension of the leather of a pair of bellows; to avoid circumlocution, he calls this the sound of extension; thirdly, a prolongation, and, possibly, an augmentation of this sound, by the sonorous vibrations peculiar to muscular fibre.'"

The same experiments which led Dr. Hope to adopt and modify the opinion of M. Rouanet as above, led Dr. Williams to the following conclusions:—"That the first sound is not dependent on the closing of auriculo-ventricular valves is evident, from five observations in which the closure of these valves was partially or completely prevented, yet the first sound continued."

I have here to remark that the experiments referred to, as detailed by Dr. Williams, were not conclusive in favour of his view, but the contrary; for we have it on the authority of Dr. Hope, that the partial impediment to the action of the valves produced an equivalent alteration in the intensity and clearness of the heart's sounds.

These remarks are also at variance with the following, which occur in the next page:—

"If some of these circumstances be removed, as in my experiment, where the *resistance of the valves*, or the mass of blood, was *taken away*, the sound of the heart will be heard in the duller and more subdued character of common muscular sound. Probably, in common pulsations, the ventricles do not attain the degree of tension that is sonorous until the closing of the auricular valves; this closure, as the commencement of the resistance, brings at once to its acme

the muscular tension, which continues until the contents of the ventricles are sufficiently expelled. This accounts for the sudden flapping commencement of the first sound, and suggests how the due action of the valves contributes to its clearness. The auricular valves, the chordæ tendinæ, and the internal fibres of the ventricles, if they attain the same degree of tension as the exterior of the ventricles, may have an equal share in the production of the first sound; but I am disposed to think that what we hear proceeds chiefly from the contracting tenseness of the external walls of the heart, both because they are nearer to the ear, and because, in one observation, the contraction of the left ventricle upon my finger within it was by no means so abrupt or strong as that of the exterior, as felt by the other hand, and still heard through the stethoscope."

I cannot conceive how Dr. Williams can question, whether or not the valves attain a degree of tension equal to that of the muscular substance of the ventricles. In a paper, in THE LANCET of Jan. 12, 1832, I have demonstrated that the valves must attain a *more abrupt* and a *greater tension* than the substance of the ventricles, and I feel confident that Dr. Williams's acquaintance with physics would, after a short consideration on the point, lead him to the same conclusions. Dr. Williams should remember, that his finger trammeiled the action of the very valve whose degree of tension he assumes it to have measured. The ingenious arguments, in the latter part of the above quotation, appear to me to involve a *petitio principii*; they certainly do, if Dr. Williams would wish to infer that the first sound is not of valvular origin, because the sound heard by the ear, is that occurring in the external fibres of the ventricles; for, the question is not, *Where* are the vibrations? but, What is the *cause* of those vibrations?

Again: "The *cause* of sound is *resisted motion*; and the strongest and quickest motion, most abruptly and forcibly resisted, will give the loudest sound. Hence the ventricles, rapidly contracting from their flaccid state, give most sound when their motion is *first resisted* by the mass and weight of the blood within them, which is confined within the auricular valves."

And when, I would ask, is the motion "first resisted?" Why, when the valves close. And when is the blood "first confined?" Why, when the valves close. *Ergo*, Dr. Williams conceives that his explanation, given in 1828, that the first sound is a muscular sound, was correct. Really, this appears to me to be a decided *non sequitur*. Dr. Williams further argues, that the above three explanations of Dr. Hope are all contained in "one simple principle,"—that of sudden tension. This, I think, is perfectly correct; but I cannot allow that this principle is contained in any of Dr. Williams's previous expositions of the heart's sounds, nor that the above explanations are applicable to muscular sound; but I think the reader will perceive that all the above explanations are resolvable into that given by me in THE LANCET of Sept. 23, 1833, in a paper to which Drs. Williams and Hope have referred, and from which the following quotation is taken:—

"Any flexible solid, suddenly brought from a state of relaxation to a state of tension, vibrates, and its vibrations are sonorous or not—i. e. audible or not, according to its physical structure. At the commencement of the systole of the ventricles, their auricular valves are flapped into play, and, at the instant of their closure, the whole *substance* of the *ventricles* and the valves are suddenly brought to a state of tension, and then, consequently, they vibrate. I leave it to the reader to determine whether the vibrations of the valves, or of the muscular substance of the ventricles, would most contribute to the formation of the first sound."

The objections advanced by Drs. Hope, Williams, Bouillaud, and other writers, may be valid, and may apply to the theory of M. Rouanet, but they do not apply to mine. I remain, Sir, your obedient servant,

E. L. BRYAN.

Stowmarket, Feb. 23, 1836.

GERMAN JOURNALS.

PRESS of matter prevents us from passing in review all the articles contained in the last numbers of the German journals which we have received; we shall, therefore, content ourselves with an enumeration of their contents, and a brief notice of the most important papers to be found amongst them.

Hecker's Annalen, Vol. II. Nos. 3 and 4; and Vol. III. No. 1.

1. On the Influence of Trades and Professions on the Health and Mortality of a Population. Part 1. By Dr. FUCHS. We shall wait until the second part is published before giving an account of this interesting memoir.

2. On Gastro-enteritis. By Dr. KOHLER of *La Charité*.

3. *ON SCARLATINA.*

By Professor LICHTENSTADT *of Berlin, St. Petersburgh.*

This is a long memoir, containing an account of the epidemic scarlatina which prevailed in St. Petersburgh in the winter 1834-35. The author, agreeing with most writers, considers scarlatina as a disease which

is eminently contagious; he cites several cases, where it was transmitted from house to house through the medium of visitors, who themselves remained unaffected; however, by using proper precautions, he was always fortunate enough to avoid the danger. The period of contagion is often protracted to a very considerable length of time; the professor was accustomed to consider six weeks as the maximum, but during this epidemic the disease was evidently transmitted from one individual to another, at the distance of eight weeks from the commencement of the attack; a long-continued exfoliation of the epidermis seems to favour the prolongation of the contagious period. The only method of checking the disease, is to avoid as much as possible all circumstances by which its contagious property may be propagated. Dr. Lichtenstadt has experimented with belladonna—a remedy much praised latterly as a preventive, but without any good effect.

The march of scarlatina may be divided into three periods; that of invasion, that of eruption, and, finally, the period of desquamation. The first rarely lasts beyond twenty-four hours; as a general rule, it may be laid down that the disease is dangerous in proportion to the shortness of the first period; however, this admits of several exceptions.

The second period, or that of eruption, lasts usually from seven to nine days, unless it is cut short by the child's death. In the latter case it may terminate in eighteen hours (one example of which kind the author observed), or in thirty-six hours after the commencement of the period. The colour and extent of the eruption are very various. Some writers advance that a deep-red colour, uniformly spread over the whole body, is a favourable sign; on the contrary, the author thinks the danger is always increased in proportion to the intensity of the eruption.

The pulse, as is usual in this disease, was always quick, and not reduced by the appearance of the eruption; at 100, it was not an unfavourable symptom; the pulse often rose to 120, and this also without indicating any great danger; but the disease was always the more grave and fatal, in proportion as the pulse exceeded this latter degree of frequency.

Bloody evacuations were sometimes observed during the course of this period, but they did not seem to exercise any remarkable influence in its march or termination; several children were seized with epistaxis, some recovered; others died. One patient, who died on the fourth day after copious loss of blood from the nose, was seized thirty-six hours later with violent hemorrhage from the vagina. The indications drawn from an examination of the urine, or alimentary excretion, do not present anything remarkable. The state of the tongue has always been considered of great importance, especially for the diagnosis of scarlatina. We have almost invariably observed the red, developed papillæ, at a very early stage; however, the author says, in the present epidemic, for the first few days after the appearance of the eruption, the tongue was covered with a whitish, or a yellow-white fur, by no means characteristic of scarlatina, and not differing from that observed in common fevers; however, the anterior portion and edges of the tongue gradually assumed a reddish colour, which soon acquired the true scarlatina tint.

Some cases of gangrene of the fauces were observed, but the author saw hardly any example of the diphtheritic inflammation, described by BRETONNEAU as extending to the pharynx and larynx. In one case this gangrenous inflammation was complicated with croup. In several cases also, especially towards the end of the epidemic, the author observed a ringing cough excessively like croup, but all these terminated favourably. The duration of the desquamating period is various. In some cases the desquamation was not completed six weeks after the commencement of the disease; in others it was still more protracted. The complication of this period was, as usual, anasarca; general anasarca and abdominal dropsy often occurred, but never in a fatal form: one case of fatal thoracic effusion presented itself in the case of a child four years old; the cavity of the chest contained two pounds of clear fluid. No case of acute effusion into the cavity of the skull was observed.

The treatment pursued by the author seems very rational, and does not differ in any remarkable manner from that which would be adopted in this country. He justly condemns the antiphlogistic method, when pushed to too great an extent, preferring mild cooling regimen, and a moderate use of blood-letting when absolutely necessary. The experiments which he made with cold affusion do not seem to have given very favourable results, and he prefers rubbing the skin with warm oil. The inflammation of the throat did not appear to be alleviated in the least degree by leeches, and purgatives with emetics had not a much better effect. In a word, the result of the author's observations on the treatment of the second period is, "that medicine is only of negative value, and that when a cure does take place, we are indebted to nature for the fortunate result."

THE MOTOR AND SENTIENT NERVES.

4. De Differentia et Nexu inter Nervos Vitæ Animalis et Vitæ Organicæ. By J. VAN DEEN. Lugd. Batav. 1834.

THE fourth article has the above title. After a short description of the difference

and relations existing between the nerves of animal and organic life (the motor and sentient nerves), the author proceeds to distinguish these nerves according to the difference of their functions. The first chapter contains a rapid history of the experiments hitherto performed on the anterior and posterior branches of the spinal nerves, and a description of the manner in which the nerves are distributed in the posterior extremity of the frog. The first and most external of these nerves (*nervus inguinalis*) passes out between the 7th and 8th vertebræ, and is distributed to the muscles and integument of the inguinal region and upper part of the thigh. The second branch (*nervus cruralis*) passes to the muscles and skin of the thigh. The third (*nervus ischiaticus*) is lost in the integuments and muscles of the leg and foot. These three nerves have each a double root, while the fourth, or pudic nerve, distributed to the skin of the perineum, has only a single posterior root. The latter is furnished with a whitish oblong ganglion situate outside the coccyx, while the ganglia of the sensitive roots of the other nerves are placed in the vertebral canal; these four nerves anastomose with each other and with the sympathetic nerve. The author repeated the usual experiments on the anterior and posterior roots of the nerves in frogs, and obtained results exactly similar to those described by Müller and Panizza. He next endeavours to ascertain the nature of the connection between the several nerves just described. After dividing both roots of the inguinal nerve, the frog was unable to draw up the foot towards the abdomen. Division of the crural nerve produced paralysis of the thigh and leg. Division of the three branches was followed by paralysis of the whole extremity; when the inguinal nerve was divided above its connection with the crurals, the motion of the foot towards the abdomen was equally destroyed. After division of the united branches of the inguinal and crural nerves, the animal could no longer move the thigh to the abdomen, and the same result was sometimes obtained by cutting through the inguinal nerve above its junction with the crural. The author explains this latter phenomenon by the fact that the inguinal nerve is often very large, and contains some of the primary filaments of the crural. When the superior part of the anastomosis between the inguinal nerve and the crural is cut through, the whole limb is paralyzed, just as if they were divided below the point of union; and hence the author concludes that the primary filaments of the two nerves here not only lie in juxta position, but decussate each other. If the ischiatic nerve is divided above its junction with the crural, the toes, foot, and the greater part of the leg, are paralyzed, but the animal can still jump. On the contrary, when the crural is divided, this motion is lost, although the action of the foot and leg remains.

In order to verify the experiments of Flourens, both hemispheres were removed in a rabbit; the animal lay in a state of stupor, but when the extremities were stimulated it moved: three quarters of an hour later the cerebellum was removed, and on dividing the corpora quadrigemina, violent convulsions came on, and death followed in an hour. The removal of the right hemisphere in another rabbit, did not produce any external signs of pain, nor did the division of the olfactory or facial nerves of the same side give any sort of effect. The animal lay quiet, but moved when the extremities were pinched. Touching the corpora quadrigemina, caused rapid motion of the limbs. An hour after the experiment, the animal closed the eyelids when light was passed near the eyeballs; the pupil contracted; during the night it lay quiet, and died in thirty-one hours after the operation. A portion of the cerebellum was removed in another rabbit. The animal gave no signs of suffering: on cutting down deeper, some lateral motion was produced: after some time the motions ceased, but the animal was unable, with all his efforts, to raise himself up. Resection of an hemisphere in another rabbit, produced a rotatory motion that lasted six hours, and did not reappear, although the animal lived for seven days. From the above experiments the author concludes that the cerebrum is the organ of volition; the cerebellum that of co-ordinating motion; the spinal marrow the conductor; and the nerves the exciting agents of motion. In the second chapter, the author endeavours to show that the lower an animal is in the scale of creation, the less difference do we find between the nerves of animal and organic life. When a simple nervous system exists, it serves equally for motor and sensitive functions: he regards the recurrent nerve of insects as the nervus vagus, which possesses no evident sensation, according to his experiments; it has the peculiarities of an organic as well as an animal nerve. The independence of the vagus and sympathetic nerves is proportioned to the elevated scale which the animal holds (as Weber first proved), and this fact is confirmative of the opinion advanced by our author in the connection between the nerves of animal and organic life. As a proof of its truth, the author quotes a discovery which he made while observing the larvæ of the rana paradoxa. He found a lateral branch of the nervus vagus (similar to that in fishes) which anastomoses with the branches passing to the branchi, with one distributed to the head, and with one for the intestines.

The sympathetic nerve is altogether absent in the beginning, and only makes its

appearance in the course of the animal's development. The vagus at first grows in proportion to the growth of the tail and anterior extremities. When these are fully developed, and the animal assumes more the organization of a land animal, the vagus declines. The formation of the vagus and the sympathetic nerve are in inverse proportion, and the animal and vegetative nerves are the more independent of one another in proportion as the animal holds a higher rank in the scale of creation. The author distinguishes three classes of nerves, according to the independence or non-independence of the animal and vegetative nervous systems: viz.,—1st. In the lower classes of animals we find only one nervous system, both being united to form this one. 2nd. The distinction is imperfect in those cases where the vagus, detached from the central nervous system, possesses animal and organic functions. 3rd. Here there is a distinct sympathetic nerve, which is the more perfect and independent as the animal is placed higher amongst the mammalia.

The mutual connections between the organic and animal nervous systems has a double object. On the one hand it endows the organic nerve with motor and sometimes even with sensitive properties. On the other hand it gives organic force to the animal nerves, without, however, interfering with the sympathetic affections.

The sensorial nerves consist, 1st. In the chief nerves of the senses which have no connection with the other animal nerves, nor any direct or indirect anastomosis with the organic nerves. (The nervus centralis perforates the optic, and probably a similar state occurs in the so-called double anastomosis of the facial and auditory nerves.) 2nd. The nerves which convey not only the qualities of things, but also their effects on our bodies. These comprehend the nerves of taste and feeling; all these nerves, in addition to their peculiar function, are possessed of sensibility in general. 3rd. The remaining sensitive nerves, which seem simply to possess the power of sensitiveness.

The motor nerves are, first, nerves that do not anastomose with the sensitive nerves: to those belong the third, fourth, and sixth nerves; and, secondly, those that unite with sensitive nerves. The motor power of the organic nerves is derived from the motor cerebro-spinal nerves; every one knows that this property continues a long time after the central nervous mass has been removed. On the other hand, the animal nerves possess certain organic properties, viz. the nerves which accompany the arteries. Neither the brain, nor the spinal marrow, nor the sympathetic nerve, can with propriety be regarded as the centre of nervous actions. Were the latter the case, for example, for the cœliac plexus, an animal would die *immediately* when it is removed, and not gradually, from peritonitis, as the author has found. We can only discover a centre of this kind in inferior animals, where the animal and organic systems are united together, but in higher orders if we seek this, we must look for it in a point where the animal and organic powers are united, and from which they act upon the other nerves. This point is the medulla oblongata, which gives origin to the nervus vagus. This is possessed of a power intermediate between that of the animal and organic nerves. Its animal function cannot be destroyed (as in animal nerves) without injury to its organic function: it is developed before the sympathetic. Respiration, the function over which it presides, is a mean between the animal and organic functions, and, besides this, it exercises an evident influence on the digestion and circulation, and is the first which enters into activity in the new-born child.

PAROCHIAL MEDICAL CONTRACTS.

"DA DEXTRAM MISERO."

To the Editor of THE LANCET.

SIR,—In the concluding part of my last communication (which you did me the honour to insert in THE LANCET of the 2nd ultimo), some of the errors of the Poor-Law Commissioners are briefly recorded. I pointed out the increase produced in the number of medical monopolies; the still further reduction of the late miserably low rate of medical pay; the inhumanity of farming out the care of sick paupers to the lowest bidders, by advertising for tenders, and the impropriety of employing young men, immediately from the schools of medicine, to attend in difficult and dangerous cases of midwifery &c. I observed also, that by paying the surgeon a fixed price per patient, while the power of granting orders for his aid was limited to the relieving-officer, severe and dangerous cases only would be committed to his charge, and often not until it would, under Divine Providence, be too late to save the lives of paupers. And, lastly, my fears were expressed as to what might become of those unhappy patients, for whose medical care nothing was to be paid. Certainly a most unaccountable method of providing medical aid for a portion of the sick, is to inform the surgeon that he is not to receive any remuneration for his remedies and services. In the Commissioners' Report to Lord John Russell (Aug. 8, 1835) are the following words:—"In some Unions, as in the Wexcombe Union, it has been provided, that the terms of the contract should be a remuneration, at

a given sum per head, on the number who receive medical aid; but with the proviso, that the gross charge shall not exceed a given amount;" and again, "that the aggregate charges for medical relief within the new Unions, shall not exceed the aggregate of the former expenditure for medical relief in the separate parishes now included in the Unions." The old salary was fixed at 10*l.* per annum; the new charge is 2*s.* 6*d.* per patient; the number of patients 100; of which the first 80 are to be paid for (eighty half-crowns being equal to 10*l.*), and the last twenty are to be attended and provided with medicine gratis!

In this letter, Sir, allow me to comment on some other points, introduced in the above-named Report, concluding with remarks on the scheme proposed by your ingenious correspondent "RURICOLA," in the course of which his strictures on my plan, it is to be hoped, will be sufficiently answered.

The advantages of the Commissioners' system of medical contracts are singularly illustrated in their Report, by the evidence of a medical witness. "I approve of the system," says the witness; "but the amount in the present contract is inadequate. I think I shall lose a guinea a-week by it. In some of the parishes it is at present only one-third of what I have received in former years for the same time. But I approve of the system for these reasons; it is a self-acting check upon the relieving officer in giving improper orders, or withholding proper orders, upon application for medical relief, in making the patient feel that, in receiving it, he is a pauper, and causing the parish a specific charge for him; and upon the medical man, by causing an inquiry into each case, so that none can escape attention, and by that means also secure proper attendance to the patient." Certainly no relieving officer, in the *honest* discharge of his duties, will give improper orders in favour of medical men. But, according to the Report, "the inferior officers" (under the old system) "have been fee'd by the medical officers, to search out, and give them information of, cases, under the expressed, or the implied condition, that they should be allowed to charge whatever they pleased for attendance and treatment of non-parishioners, under suspended orders of removal, or orders of medical relief given by the overseer." Now, suppose the relieving-officer to be fee'd for granting as many orders, during a healthy year, as would not otherwise have realized the amount of the old salary; or suppose the surgeon to be his son, or his brother, or his bosom friend, what becomes of "the check" on giving "improper orders?" On the other hand, imagine them at variance with each other, while the relieving officer is anxious only to prove his zeal for economy, and to curry favour with most of the guardians; where is the check on "withholding proper orders?" And, lastly, how is "proper attendance to the patient secured," under a system which entails on surgeons a heavy pecuniary loss?

The Report speaks of the "credit of the appointments," "the wider fields they offer for the display of care and skill, leading to more profitable practice,—the inducements differing in degree, but being similar in kind, to those upon which men of the most eminent skill find it to their interest to give their services to the chief medical institutions of the country." *Credit* in receiving an appointment from guardians as the reward of a medical contract, entered into by letters of tender, through public advertisements, in precisely the same way as that in which bakers and butchers are appointed to serve the Unions with bread and meat!!! It is admitted, by implication, that these enviable fields for the display of practice (and horsemanship) at half-a-crown, or three shillings, per patient per annum, are *unprofitable*; which circumstance, together with the degrading condition of the paltry pay annexed to those appointments, will sufficiently explain why many of the most respectable surgeons in the provinces are at issue with the Commissioners.

If medical men are to be paid so much per patient, I would humbly request the Commissioners' attention to the following rate of pay, founded on the scale already constructed by me, and the relative number of sick annually occurring among a given number of paupers.

Without quoting Dr. Rees, and other able writers, on this point, and without pointing out causes which must ever produce variations in calculations of the above kind, perhaps I may be permitted, at once, to set down the number of sick as one in every three persons throughout the year. More than this proportion occurs in the parochial medical practice of this town, and less in the adjoining rural parishes; but, as a general average, the proportion of sickness to health, occurring annually, is not overrated, considering that paupers consist of persons of all ages, and of both sexes, and that they are exposed in a degree beyond all other classes of the poor, to the evils of poverty. My former scale of prices, per pauper, begins with 2*s.* for the care of from 50 to 300, and thence descends through fractions, as the scale ascends by single hundreds, to 10,000 persons; the price, per pauper, at that number, being 9¼*d.* and a fraction. For *patients*, therefore, I would suggest a scale, beginning with 6*s.* (per patient) for 100, and below that number descending in price, in like manner, as the scale ascends, by every 33 patients, up to any number attended by the medical officer, thirty-three and a half being the proportion of sickness among 100 paupers.

The scheme proposed by "RURICOLA," consists 1, of granting power exclusively to parish surgeons, as to the necessity of their bestowing assistance on sick paupers; 2, of placing the election of medical officers in the hands of rate-payers, as before; and, 3, of paying so much per case, per annum, according to the number of cases, and the distance at which the patients may reside from the surgeon; charging 1*s.* per case for medical services, from 2*s.* to 3*s.* for drugs, and 4*d.* a mile for journeys, whether visited by the surgeon or not. This would be giving too much power to surgeons, who might make a case of every ailment in the parish, or it would lead to a suspicion of his doing so; it would render uncertain the amount of medical expenses, and create opposition in parliament, more particularly on the part of those members who represent the landed and manufacturing interests. The medical appointments in question were formerly made by rate-payers, under the old system, when favouritism and monopoly left hundreds of active and competent surgeons without parochial employment, and thousands of afflicted paupers to linger and perish, unheeded and neglected. Whoever was the professional attendant of the farmers and their families, was almost sure of obtaining their votes: they seldom knew, or cared to know, how many parishes had elected the same surgeon (whether two or twenty), or whether the surgeon had, or had not, undertaken to perform duties which were superhuman: or whether the most helpless of the human race were neglected or not, in the hour of sickness and death. Indeed, even the election of surgeons *by the guardians*, to districts of from five to ten parishes, and to unions of from fifteen to twenty-seven parishes, will alike entail on our poor and unhappy fellow-mortals the same cruel evils. It is for these reasons, which I deem paramount to all other considerations (for, *non nobis nati*), that I would do away with medico-parochial elections *altogether;* that I would put in requisition the services of all the medical men who are competent and willing to render them, appointing them to such offices in *rotation*, and AS A MATTER OF RIGHT, not of favour, in order that a tolerably minute division of medical labour might be effected for the benefit of the poor; and by limiting the duties of each surgeon to three or four of the smaller parishes, and to a given number of paupers in the larger and more popular parishes, that all parochial surgeons, especially those whose aid and skill are rendered invaluable by *experience*, (but whose private practice is not inconsiderable), *may have it in their power to attend fairly to their poorer*, as well as to their richer, neighbours. Parishes should not be suffered to appoint surgeons otherwise than in rotation, where there are two or more resident surgeons; and where there are no resident practitioners, the care of the sick should be offered to the neighbouring surgeons, likewise in rotation, after two years' residence and practice, if living within a given distance. This accords with the 6th regulation, as suggested in my plan of 1834, and the 7th in THE LANCET for April 30, 1831,—the power of granting orders for medical attendance, being extended to the officiating minister. This mode of appointing duly qualified medical men to parish surgeoncies would prevent all the evils of elections, while, by placing medico-parochial practice in the hands of almost every medical practitioner, the science and practice of medicine would be advanced. All the objections, also, of "RURICOLA," to my mode of remunerating parish surgeons, will instantly vanish, in a practical point of view, if surgeons be appointed to parishes in rotation, since each surgeon in his turn would have the good and the indifferent bargain to deal with, and therefore would be placed on the same footing with his neighbour. But more of this on some future occasion.

With respect to "RURICOLA'S" calculation of the cost of drugs, from the Rev. Mr. Oxenden's "Statistical Report of the Principal Provincial Hospitals in England," it must fail, because it is founded on the presumption, that parish surgeons will grant to sick paupers, fairly and liberally, all the remedies necessary in the treatment of their diseases, whether they be purchased and paid for by others, or by themselves. Hospital surgeons have no earthly motive in withholding any, even the most expensive, medicines from the sick poor, while parochial surgeons have a direct pecuniary interest in supplying them very inadequately, both as to quantity and quality.

"RURICOLA" charges, on his scale, 1*s.* per case for medical services; from 2*s.* to 3*s.* for drugs, and 4*d.* a mile for distance. Before, however, noticing the proposed scale, it may be as well to observe, that a surgeon residing a mile or two from any given parish, having a resident practitioner, would seldom be elected by the rate-payers, however ineligible and unworthy the latter surgeons might be,—those persons generally seeking to save themselves, at the expense of humanity, from the higher rate of medical pay. The scale runs thus, taking the first and last lines of it:—1 *mile*—25 cases at 6*s.*—50 at 5*s.* 6*d.*—100 at 5*s.*—200 at 4*s.* 6*d.*—400 at 4*s.*—800 at 3*s.* 6*d.*—1600 at 3*s.*—6 *miles*—25 cases at 7*s.* 8*d.*—50 at 7*s.* 2*d.*—100 at 6*s.* 8*d.*—200 at 6*s.* 2*d.*—400 at 5*s.* 8*d.*—800 at 5*s.* 2*d.*—1600 at 4*s.* 8*d.* In working this scale, the major number of patients yield less pay than the minor in each column, and throughout every line of it, when the patients arrive at a given number. Thus 1595, at 3*s.* 6*d.*, would produce

279*l.* 2*s.* 6*d.*; while 1600 at 3*s.* would give only 240*l.*, or 39*l.* 2*s.* 6*d.* less. Again, 1595 at 5*s.* 2*d.* would yield 412*l.* 0*s.* 10*d.*; but 1600 at 4*s.* 8*d.* would produce only 373*l.* 6*s.* 8*d.*, or 38*l.* 14*s.* 2*d.* less than the minor number of patients.

"RURICOLA" proposes, that "some intermediate rate of payment, suited for each parish, be agreed on at the beginning of the year (perhaps, according to the number of cases attended during the previous year), otherwise either party concerned might, by fraudulent management, increase or reduce the sum total paid for the same amount of labour at the end of the year." Also, that "every case of illness or accident in the same individual, however close in succession, should be charged for; but a relapse of the same disorder, occurring within one month from the date of discharge, should be considered as part of the former illness." The former suggestion appears to me to be at variance with a fixed scale of remuneration; the latter proposition would be productive of disputes, but very desirable, if acted upon, so far as medical interests are concerned. I know a few score of paupers in this parish, who have been on the parish-surgeon's list for the last twenty years. The surgeons here are appointed to the parish *in rotation*, after a certain period of residence and practice, during which time it has been my lot to fill the office five times. The description of invalids to which I allude have been under my care, on those occasions, every month in the year, for some ailment or another. Consequently, on "RURICOLA'S" plan, each would have yielded me 3*l.* 12*s.*

I perfectly agree with "RURICOLA," that the ordinary cases of midwifery should be attended by female midwives, the surgeon receiving one guinea for his services in difficult cases, as generally under the old system, "since it would be a saving to parishes and a relief to the medical officer," and, above all, since any fee, short of this, will end frequently in death to the patient. (E. g.) The poor-law commissioners allow only half-a-guinea. The midwife sends to the surgeon five, or even ten miles off. The surgeon says to his senior pupil—"You can manage it. Go, and send for me if really necessary. I don't want their paltry half-guinea, when I can get at least that sum in this town or village for midwifery." The hour-glass contraction takes place, or some difficulty occurs which the young gentleman cannot master, and which the surgeon did not anticipate, and the poor woman dies before the latter can reach her. The rate-payers of a parish not far from this town included midwifery in the contract, thinking themselves wiser than their neighbours, who invariably paid a guinea for each case; the midwife sent for the surgeon to a case of flooding, who directed a very intelligent and well-educated pupil to act for him. It so happened that the placenta strongly adhered to the uterus, and the poor creature died from flooding, the placenta being undelivered. If there had been the small fee of one guinea forthcoming for the surgeon's trouble and skill, and the breaking of his rest, ten to one but he would have visited the case himself, and the woman's life would have been spared. To do justice to this subject, a volume of well-condensed matter-of-fact narrative might easily be written.

Of course there should be a separate charge for vaccination, as "RURICOLA" intimates, or the practice will fall more into disuse in the rural districts than ever. The prejudice against vaccination exists almost exclusively with the poorer classes. It would be wise, therefore, to give the surgeon a direct interest in extending the practice of vaccination among them.

"RURICOLA" thinks that "should it be found desirable for parishes to find their own drugs," it could not be satisfactorily effected on my plan, but might on his scale; and imagines that I must "contemplate some reduction of my scale," on account of this separate parochial payment for medicines. He feels "convinced that in agricultural districts, with a scattered population, there can be no depot for drugs except the medical man's own residence, however suitable or practicable it might prove in large towns." I answer, 1st. In large towns the depot can beat the workhouse. 2ndly. In the districts it can be established in some room near the surgeon's residence; in which he, or his assistant, or his pupil, can dispense the requisite remedies, and see the out-patients at stated hours, without converting the latter into a hospital, and mixing up his private with his pauper patients.

The 4th regulation in my plan (see No. 400 of THE LANCET) is to the effect, that 1*s.* per mile be paid for journeys, in addition to the scale of salaries, beginning with the second mile, which I omitted in my pamphlet of 1834, because this item of medical pay might be opposed in Parliament, as unsettling the amount of salaries, and opening the door to real, or supposed, imposition. In lieu of this, I proposed that the expense of drugs be defrayed by parishes, and by so much, in augmentation of pay under my scale, and by way of indemnifying parish surgeons for the loss of the mileage item of remuneration, which I had previously annexed to the scale of salaries, but which I had subsequently withdrawn.

"The probability of paupers diminishing under the Poor-law bill, faster than patients," is an additional reason why the cost of drugs should be in augmentation of salaries, under my scale, on my withdrawing all charge for journeys.

Besides the many reasons which may be

urged in favour of parishes finding their own drugs, another reason occurs to me, viz., that those surgeons who do not dispense medicine, will thus have it in their power to accept of medico-parochial appointments.

I am, Sir, your obedient servant,

J. C. YEATMAN.

Frome, Somerset, Feb. 12, 1836.

THE LANCET.

London, Saturday, February 27, 1836.

THE public mind has once more received a terrific shock in consequence of the fatal catastrophe which has just followed another infliction by the cat-o'-nine-tails, on the back of a marine in the barrack of Woolwich.

But was the flogging the cause of death? The medical witnesses who were examined at the inquest think that it was not. Eight of the jurymen were, in the first instance, of a contrary opinion, but a majority of that body ultimately decided, that "the unfortunate man died by the visitation of God, "and not by the hands of any person or "persons whatsoever." This is the verdict. But whom will it satisfy? None but the advocates of human torture. None but the admirers of a brutal system of treating the soldiers and sailors of this country.

Some of the facts of this case we can state from personal observation. When it was stated in the *Weekly Dispatch* of Sunday the 21st instant, that another unfortunate criminal had been flogged at Woolwich under very distressing circumstances, and when we farther saw, on Monday last, that the victim of cruelty had ceased to exist, and that an inquest was to be held on the body on that day, the Editor of this journal considered that as a member of the medical profession, and as the occupier of a seat in the Legislature, it was his duty to see the body of the deceased, and to inquire personally into the circumstances of the case. Accordingly he proceeded to Woolwich, when, on his arrival at two o'clock, he was not a little astonished to hear that the inquest, after the jury had been sitting for about an hour and a half, had adjourned to the following morning, to be again resumed at nine o'clock. On repairing from the *Ship Tavern*, where the coroner and jury had met, to the Infirmary of the barracks, we were at once admitted to a view of the body. No attempt was made at concealment, no desire was manifested to misrepresent the details,—none to withhold the knowledge of a single fact from any inquirer. The conduct of Mr. PARKIN, the chief-surgeon of the barracks, was not characterized by the slightest reserve, and his conduct clearly manifested that he had in all respects discharged his duty to the sufferer. The advocates of the flogging system cannot, in this instance, cover the disgrace of the fatal event by accusing the surgeon of neglect, or the absence of a knowledge of his profession, or of unkindness of heart; and both the relatives of the unfortunate soldier and the public may be assured, that all was done in the Infirmary of the barracks, that could be accomplished by medical skill and humane attention, to divert the catastrophe which followed the flogging.

As the young man had died only on the previous morning, the body was perfectly fresh, and no sign of disease appeared upon it, from head to foot, except in the remains of the cruel blood-red wounds (which were situated immediately over the spinous processes of the dorsal vertebræ), and in the inflamed surface by which those wounds were surrounded. So far, therefore, as external appearances were concerned in viewing the body, the only evidence of disease was observed where the instrument of torture had been applied. It was prudently determined, therefore, by the jury, that an examination of the internal organs should be instituted, and the inquest had adjourned a short time before we reached Woolwich, for the purpose of having this duty executed.

It was agreed, we understood, that the examination was to be conducted by the barrack surgeons, by Mr. BUTLER (the parish surgeon), and Mr. GRAINGER (of the *Webb-Street School of Anatomy*). Unfortunately, we were prevented from attending the adjourned inquest, but a brief report of the proceedings was published in the *Times* of Wednesday. As no contradiction of any portion of that report has since appeared in the journal in question, we may, we suppose, take it for granted that the abridgment of the testimony has been correctly given. On looking at the list of medical witnesses, however, we find no mention made of Mr. GRAINGER. We are the more surprised at this circumstance, because, on returning from Woolwich, we met Mr. GRAINGER travelling in the direction of that place, and his private residence is situated within a very short distance from the barracks. We ask, then, was Mr. GRAINGER present at the post-mortem examination, and if so, why he was not questioned in preference to the comparatively inexperienced and unknown Mr. SAMUEL SOLLY? And who were the medical witnesses on the occasion? Mr. PARKIN, surgeon of the barracks; Mr. JAMES LAWRENCE, a naval surgeon, who was sent down by the head of the Navy Board; Mr. BUTLER, the parish-surgeon, of whom we have heard it said that he is not unfavourable to the punishment of flogging; and Mr. SAMUEL SOLLY, a young person employed in the dissecting-room of *St. Thomas's Hospital*, whose reputation as a pathologist has yet to be created.

After the medical testimony had been given, eight of the jurymen declared that they were of opinion that the death was produced by the flogging, but the other nine jurymen were for returning a verdict founded upon the medical evidence, and at last the verdict which we have above written was recorded.

As the medical witnesses may allege that their evidence has not been correctly reported, we shall not insert any portion of it on the present occasion; but shall wait until we can procure an official copy of the testimony, through the instrumentality of a motion in the House of Commons, and an order from the Crown. As the report, however, in the *Times* agrees throughout in stating that the medical witnesses all concurred in declaring positively, that the flogging was not the cause of death, but that the man died from the effects of a fever, and that the fever was the product of some foulness of the air, or of the earth, or of the waters under the earth, we cannot refrain from saying a few words on this part of the subject. We must tell these gentlemen, therefore, at once, that their opinions are unsound and unphilosophical, and utterly at variance with those of every esteemed writer on morbid anatomy, and if such evidence—if such nonsense can be termed evidence—were generally received in our courts of judicature, the science of medicine, and even medical practitioners themselves, would be converted into objects of scorn, derision, and disgrace.

Observe. The only *apparent* cause of the fatal calamity,—the *only* cause which was subjected to the operation of the senses,—is discarded by these acute practitioners and witnesses, in order that, like so many ghosts, they may spirit themselves into the air, earth, and water, to discover, in absurd conjectures and wanton hypotheses, a reality which they have not the sagacity to detect in a plain matter of fact. What was the state of the health of the man when he was flogged? It was sound and excellent. Nay, it was alleged by all who knew him, that he was in rude and robust health. He was in this state on the 8th of February, the day on which his back was lacerated. On the 20th he was a corpse. Now mark. The medical witnesses are not content with merely saying that they *cannot discover* the cause of death on inspecting the body, but they take upon themselves to say that the flogging was NOT the cause of death! *Ab-*

surdity can go no farther. If in such a case they be incapable of maintaining the affirmative proposition, how can they prove the negative? We will not say that such conduct is dishonest, but we cannot refrain from alleging that it is most mischievous. Ah, had there been a medical Coroner in this case, we will undertake to say that the public mind would not have been shocked by such a verdict as has been recorded by the non-medical Coroner for Surrey.

On the 8th of February, then, the day of the flogging, WILLIAM SAUNDRY was in a sound state of body, and when we saw the corpse, on the 20th instant, the day after his death, the blush of health was still apparent on his cheeks, and, as we before stated, there was no emaciation, no sign of disease or injury, except upon the back where the horrid punishment had been inflicted. The cat, as is well known, consists of nine strings of cord, with knots in each string, and a hundred strokes from this infernal machine, would necessarily produce nine hundred cuts on the skin. And on what part of the body was this dreadful punishment inflicted? Why within a few inches of the brain, the great centre of the nervous system, and directly over the spinal marrow, whence so many nerves essential to the existence of life originate. Good God! The shock which the whole system must receive from the infliction of such torture would be enough to kill the hardiest, the least sensible, of the brute creation. Now, did the medical witnesses cut down through the skin at that part? Did they cut through the bodies of the vertebræ and examine the spinal chord and the membranes immediately under the wounds in the back? If they did make such an examination, how is it that the report in the *Times* makes no mention of it? And if they did not, how can they dare to allege, in the face of the profession and the public, that the flogging was NOT the cause of death? If they did not examine the state of the spinal marrow, we tell them that their investigation was worse than useless. It was only calculated to delude. Do these gentlemen believe that the skin covering the spinal marrow may be cut, bruised, and lacerated, with perfect impunity? Do they think that there is no sympathy between the skin and the nervous system under such torture? Impossible! Their own every-day treatment of affections of the spinal marrow proves directly the reverse. They cup, blister, leech, and cauterize the skin immediately where the scourge was applied in the instance before us, to relieve inflammation and other affections of the spinal marrow, and the membranes of that important structure. The bite of a leech, or a bit of blistering fly, can operate on the spinal marrow, but nine hundred cuts and jags in the same situation cannot produce trembling in a single fibre of the nervous system! Oh this monstrous mockery of the unerring principles of the science of medicine! Will these medical practitioners deny that the prick of a pin in the finger, that a fibre of wood in the same part, will often so affect the nervous system as to produce locked-jaw and death? But there is a case, of recent occurrence, quite to the point. What was the cause of death in the case of the unfortunate Miss CASHIN? The application of a stimulant lotion to the skin in the very situation in which this poor soldier was flogged. There was no wound in the back of that young lady. Yet she was literally stung to death by the caustic lotion, and the stings which the soldier received were scarcely less poisonous or severe.

When we are placed in possession of an official copy of the evidence taken at the inquest on the body of William Saundry, we shall return to this painful subject, but in the meantime, we do hope that the English nation will call, as with one voice, for the abolition of the brutal system of flogging, as it is practised in the British army and navy.

CONTRARY to the expectation of the Ministers themselves, the charter for founding the Metropolitan University was not completed by the 24th inst. The arrangements, however, are sufficiently advanced to admit of the choice of a CHANCELLOR, and Lord BURLINGTON, who was a senior wrangler at one of the English Universities, and is distinguished for his literary and scientific attainments, will be the first individual appointed to fill that high and distinguished office.

SINGULAR CASE OF DOUBLE VISION.—At the *London Medical Society* on the 22nd inst., Mr. FIELD related a remarkable case of double vision, which in some particulars differs from the usual symptoms of such affections. The patient is a young man, aged 22, of abstemious habits, and so studious in playing and writing music, as frequently to lose a great portion of his night's rest. He first began to see objects double about two years ago, but he did not pay any attention to the circumstance. Since then the affection has continued to increase, and he now sees two distinct objects, one a few inches *above* the other; that which he takes to be the real object, appearing rather the brighter of the two. It is only at a certain distance that he experiences this phenomenon. When near, objects are not doubled. There are no symptoms of disease of the brain. The eye is dark, and the pupil does not contract to the usual extent of healthy action. What is most remarkable in the case is, the fact of both eyes being similarly affected; so that if the patient closes either, the same result follows as when they are both open. Various opinions were expressed in the Society with regard to the cause. Mr. KINGDON thought that the habit which the eye had acquired of looking at two bars of music at once, together with the abstemious habits of the patient, might have had considerable influence in the production of the disease.—Mr. PILCHER considered it either to be the result of incipient amaurosis, or an irregular action of the muscles of the eyes.—Mr. DENDY and the President thought that the cause must exist in the ball of the eye itself, some alteration, perhaps, in the humours. It was the general opinion of the Society, that the great application to music should be at once dispensed with by the patient.

DETECTION OF ARSENIC.

After an operation at the *Westminster Hospital* on Saturday last, Mr. W. LYNN exhibited to the students a new process designed for detecting arsenic in "the smallest possible quantity." The fluid supposed to contain the poison is put into a phial containing a small quantity of metallic zinc. Some diluted sulphuric acid is added, and hydrogen, with the arsenic, should any be present, is evolved. A small glass tube, inserted into the cork of the phial, gives exit to the gas which is ignited, and a glass receiver is held over the flame. The hydrogen mixes with the oxygen of the atmosphere, and forms water, while the arsenic is deposited in its metallic state on the sides of the receiving vessel.

[Might not this test in many instances be fallacious, from the fact of zinc frequently containing arsenic?—REP. L.]

ANTIDOTE FOR THE POISON OF MORISON'S PILLS.—At the close of an eloquent and excellent expostulation on the folly of yielding credence to the falsehoods promulgated by the dealers in quack medicines, for which, however, we are unable to find room, a correspondent adds the following statement:—"I wish to make known generally, for the use of those who are guilty of the folly of habitually taking the Morison's pills, that the best means to be adopted to relieve the distressing vomiting and purging which frequently follow their employment, consist simply in taking copious draughts of lukewarm water (in the case of sickness) to assist the stomach in its attempts to dislodge the poison, and mucilaginous and gelatinous drinks, such as barley-water, linseed-tea, mutton and chicken-broth, will mitigate the severity of the purging, and afford some protection to the internal coat of the intestines from the acrid and irritating effects of the gamboge, aloes, and colocynth, which are found in the pills." Our correspondent most justly remarks that until the practices of quack doctors and the use of patent medicines are interdicted by Parliament, medical science can only be a by-word with the public, as astronomy formerly was disgraced by the connection of astrological conjuration with its observations and study.

ANATOMY IN IRELAND.

THE following official letter has been lately addressed by the Inspector of Anatomy in Dublin, to the Right Hon. Lord MORPETH, Secretary for Ireland:—

Office of the Inspector of Anatomy,
Dublin, Feb. 1st, 1836.

My Lord,—As Inspector of Anatomy I have the honour to submit the return and report for the quarter ending this day. During the last three months the number of subjects sent to the schools, exceeds that sent during the entire of the year before last.

An attempt was lately made to revive the revolting practice of exhumation. Two of the party were sent to Newgate; I afterwards thought it prudent to permit them to join the Queen of Spain's troops, with their ringleader Malone (whom I had formerly convicted). Thus has this gang of desperadoes been transported with their own consent.

I am happy to acquaint your Lordship that the advantages presented to the Students of Anatomy in Dublin, are now equal to those of any other part of the world. The supply of subjects is regular without conflict, and abundant without outrage to public feeling, as formerly. The gratifying testimony to that effect of the Professors of the eight schools of Dublin was published in The Lancet of March 14, 1835.

The approbation expressed by the Dublin Professors has been further confirmed by the annexed testimonial from a very influential public body. The Inspector has only endeavoured to carry into effect the enlightened intentions of our liberal Government. I have the honour to be, my Lord, your obedient servant,

James Murray, M.D.,
Physician to the Lord Lieut. of Ireland.

Royal Belfast Academical Institution; Joint Boards of Managers and Visitors, Feb. 2, 1836; Extract from the Minutes.

Resolved Unanimously,—"That the thanks of the Joint Boards are due to Sir James Murray, Inspector of the Schools of Anatomy, for his uniform attention to the interests of the Anatomical class of this Institution.

Joseph Stevinson, *Secretary*."

Medical Coroners in Ireland.—*To the Editor*.—Sir,—In compliance with a desire expressed in a late number of The Lancet, I herewith send you a list of the Irish medical coroners, with their places of residence, taken from Pettigrew and Oulton's "Dublin Directory" for this year. I am, Sir, your obedient servant,

John Browne, M.D.
25, Holles-st., Merrion-sq., Dublin;
20th Feb. 1836.

Cavan, John M'Fadden, M.D. (and another), Cootehill.

Down, George Tyrrell, M.D. (and two others), Banbridge.

Dublin, James M'Carthy, Apothecary (and another), Aungier-street.

Louth, Henry M. Blackwell, M.D. (and two others), Dunleer.

Monaghan, Robert Murray, M.D., Beechhill, Monaghan.

Wexford, James Hamilton, M.D. (and two others), Gorey.

MR. MORGAN OF GUY'S HOSPITAL.

To the Editor of The Lancet.

Sir,—I shall feel obliged, as will the rest of Mr. Morgan's hearers, by your giving insertion to the following statement, though it is with extreme reluctance that I make any complaint on the subject. I do, however, most justly find fault. The apathy, disrespect, and apparent indolence, of Mr. Morgan towards his pupils, compel me to adopt this mode of troubling you for a small space in your valuable publication. Mr. Morgan announced at the beginning of the session that his lectures on ophthalmic surgery would be delivered on every Thursday evening, but after the first three lectures Mr. M. seldom has appeared for any two weeks consecutively. Consequently, he lately had to announce that, unless he lectured three evenings a week, it would be totally impossible for him to complete the course ere the middle of June, but if the pupils would listen to three lectures per week he could terminate the course by the end of March, and, as he did not feel particularly anxious to lecture to empty benches, he hoped that some gentleman present would take the sense of the meeting and communicate it to him in the museum, where he would await the proceeding, which ended by a great show of hands in favour of three lectures being given a week. Yet Mr. Morgan has not given a lecture on a Thursday evening since, which will be three weeks up to Thursday, February the 4th. Mr. M. cannot have had the interest of his pupils in view by this neglect; he evidently has thought that he might neglect them at his pleasure. I shall forbear saying more at this time, awaiting some apology from Mr. M. at his next lecture, or the strict deliverance of the three as arranged. Mr. M. must be well aware that his pupils have had to arrange their time for the three evenings, and most likely withdrew from some other lecturer, in order to attend according to his new arrangement. My name and address are at your service. I am, Sir, your obliged servant,

H. D. E.

February 1, 1836.

COLLEGE OF PHYSICIANS.

THE LAST HALFORDIAN HUMBUG.

To the Editor of THE LANCET.

SIR,—On Monday evening last I was introduced as a visitor at the first *soirée* for the season, of the College of Physicians, and as I am but little accustomed to such proceedings—at all events have not been made insensible to their improprieties by habit—and being, moreover, personally uninterested, and, therefore, it may be presumed, an impartial observer, you will perhaps favour me with an opportunity of stating what impression was made upon me by the scene. In doing this, if any one should think me an uncourteous guest, I would simply say, that I make no scruple in sacrificing courtesy to justice and professional usefulness, when both happen to be incompatible. There were present, as I am told is generally the case at their first meeting, a number of distinguished individuals,—the two archbishops, several bishops, the premier, and some other leading political characters. Two things, above all others, awakened my reflection, viz:—the conduct of the President as an individual, and that of the College as a body. The president delivered an oration on the death of some individuals who were distinguished for their attainments in science, Bacon, Boyle, Newton, Locke, Addison, Johnson, and Sir W. Jones. It contained a brief account of the circumstances attending the death of those eminent men, and a more particular description of their moral and religious characters. They were held up as examples to stimulate our virtue, and to strengthen our confidence in the faith we have adopted. From this account the discourse would appear to be sufficiently appropriate,—for I think on such an occasion it should not be wholly unprofessional, nor on the other hand so technical as to be uninteresting to the non-medical guests. But the mode of its execution removed from my mind every favourable impression made by the plan, and substituted in its place a feeling, deep and unmingled, of disgust and abhorrence. My object, Sir, is simply to *express* my feeling, not to prove it to be *just*, for that could not be done to one who did not witness the exhibition, and to those who did, I am sure it need not. The manner of this discourse then convinced me, that while the president did not care one straw for religion, he was determined to mix some twaddle about it with every sentence he uttered, and that he therefore made a parade of religion for unworthy worldly purposes, as one who professes to respect real religion. I was almost choked with disgust at this apparent mockery of a sacred theme. I think it an indelible stain upon the religious character of this age and nation, that any man should dare to deliver such a discourse in the presence of the leading men of the church, and of a liberal and learned profession. Yet all this is done by the nominal head of the medical profession in England, the chief official medical attendant of the monarch. Can it be true also that he has acquired this station more by this and similar practices than by the exercise of any solid, to say nothing of *superior* attainments in his profession?

The second matter which arrested my attention was the separation of the fellows from the licentiates. The upper part of the room was barred off, for the exclusive use of the president, the fellows, and the titled guests. Over the other parts wandered the licentiates and the minor attendants! To argue that the fellows were thus set apart for their *merit*, is to outrage truth most grossly. If a man has been at Oxford or Cambridge, though he may have spent his time in every species of hypocrisy, blackguardism, and debauchery, he may become a fellow of the College. It is useless to allude to individuals, the principle being the important thing; but on this occasion I saw, amongst many other men equally worthy of being mentioned, the vice-president of the most learned society in Europe, thrust as a licentiate among the *lower* ranks, like a boy in a booth, to stare at the show prepared for view in another part of the room. How can such an impudent and degrading system be tolerated even for a single moment. Finally, Sir, I am astonished that the licentiates will go to the College at all. They should stay away in a body, and thus diminish the number of gazers. I am, Sir, your very obedient servant,

OBSERVATOR.

London, Feb. 23, 1836.

DR. W. CUMMIN.—Mr. Editor,—However contemptible your opinion may be of those individuals who contribute to a journal whose main object ever has been to traduce the character of the general practitioner, and to libel the students, it is monstrous to suppose that Dr. Cummin should come forward and publicly deny that he was not the coadjutor of Dr. Rod. Macleod. Permit me to ask if it be not a fact that the papers read before the Medical and Chirurgical Society are instantly sent *to Dr. Cummin* for the sole and avowed purpose of enabling the said Dr. C. to make such extracts and abstracts from them as he may, in his wisdom, think fit for insertion in the Gazette. Should you have any doubt of the truth of this statement, let me refer to Messrs. Clendinning and Partridge, the present Secretaries of the Society, or their predecessor, who has himself become so expert in mak-

ing "Elegant Extracts," and by whom these *arrangements* with the Gazette were originated. I am, Sir, your obedient servant,

A Fellow of the Society.

Feb. 22, 1836.

Dr. W. Cummin.—To the Editor.—Sir,—Something more ought to be made known with regard to the expostulatory letter addressed by Dr. Cummin to you respecting the secret editors of the Medical Journal. Notwithstanding the statements therein made and conjointly testified, I understand that the gentleman who questioned Dr. Cummin, positively declares that Dr. Cummin did deny to him in explicit terms that he had any thing to do with the editing of the Gazette. Dr. Cummin it is thought was alarmed into telling this story by the momentary fear of avowing the connection, but having gathered courage afterwards when he saw the statement in print, he denied that he had ever disavowed the connection, because his acquaintances would have thought worse of him as denying what was so notoriously true, than they even did for his hiring his time and services to Dr. Macleod. This is the *report*. The student, I understand, was warned not to question Dr. Cummin without having by him an independent witness, but he was too unsuspecting to take the advice. However, he came straight out of the room and told to every one around exactly what appeared in the letter in your journal. I am, Sir, yours obediently,

W.

St. Bartholomew's, Feb. 19, 1836.

QUACK PILL ADVERTISING.

To the Editor of The Lancet.

Sir,—You mention that you shall speak further respecting the late murder by Morison's pills. I was induced the other evening to visit Exeter Hall for the purpose of hearing a Dr. Lynch lecture on hygeine. Morison himself, I believe, was on the platform. Between two and three hundred supporters of the system were present, and applauded to the echo the attacks of this "Doctor" on the profession. His subject was apoplexy, and he misquoted a number of great authorities to prove that they decided on condemning bleeding under any circumstances in that affection. His lecture was a tissue of absurdities and abuse. He spoke of the late murder, and said the victim was doing well until the "Doctors" were called in. He afterwards left the Hall in a carriage, which had, evidently for effect, been placed at the door for a long time before, with a *coronet* upon it, and livery servants behind, whose outer coats showed much better than *other* portions of their dress. I am, Sir, your obedient servant,

Observer.

LATE ADDRESS TO APOTHECARIES' HALL.

To the Editor of The Lancet.

Sir,—From the zealous and able manner in which you have uniformly advocated the rights of students, I feel it a duty to apprize you of any circumstances connected with the subject.

I see on the cover of the last week's Lancet, a number of names of students at the *London University*, who affirm that they were opposed to, and had nothing to do with, the meeting at the *Crown-and-Anchor*; at the head of the list is a Mr. Leggatt, who is a *pupil* of that very *courteous* functionary, Mr. Secretary Watson. Doubtless this Mr. Leggatt will be recompensed for the pains he took, during three or four weeks, in endeavouring to collect a tolerable list of names for the support of his master's interests. I need hardly say, Mr. Editor, that the greater part of these honourable and liberal minded students, in a short time, intend to present themselves for examination at the Hall in Blackfriars; and I have no doubt that this mean-spirited publication of their names, is designed to act as a demulcent on the surly growl of a Wheeler, or a Ridout, or to restrain the annoying gesticulations of a Merriman. I am informed, on the authority of a student who was present at the first meeting at *Anderton's Hotel*, that not a few of these celebrated gentlemen took a prominent part at that meeting, and even wished to become proposed as members of a committee for conducting the succeeding meeting at the *Crown-and-Anchor*. A Mr. Brightman was very conspicuous on the occasion. So much for the firmness of the students at the *London University*. I consider this proceeding a most unjust one towards all those gentlemen whose names have not appeared in the list (many of whom have taken neither side of the question), inasmuch as of course they will be considered at Apothecaries' Hall as having approved of, or taken a part in, the meeting. I am ashamed of such conduct in medical students, and regret that the character of the *London University* has been tarnished by the selfish feelings of a few interested persons operating on the fears of their fellow students. I remain, Sir, your obedient servant,

A Student of Medicine at the London University.

February 23, 1836.

LATE ADDRESS TO APOTHECARIES' HALL.

To the Editor of THE LANCET.

SIR,—I entreat you to extend your kindness to one who earnestly desires to make known the fact, that there are yet many scores of medical students at the London University, who have not disgraced their names by signing the cringing indirect petition to the Apothecaries' Company, allowed by you to be advertised last week. The professed object of the advertisement is perhaps without parallel in the way of *excuse* for its appearance. The petition is said to be got up to negative a *pretended* report, that the students of the University organized the late meeting at the Crown-and-Anchor. But it is really designed to furnish the Apothecaries' Company with a list for reference in case its favour should be necessary during some future examinations. How disgraceful thus to follow the example of the agents of the Apothecaries' Company at *King's College!* And, worst of all, to attempt to betray those fellow students who, from motives of conscience, refused to place their names among those of the frightened memorialists. When I entered my name as a student in medicine at the *London University*, I did so partly in consequence of the liberal principles on which the school is founded, thinking to enjoy the society of students whose minds and actions were far above those whom I had lately quitted. I sought the companionship of independent men, men with higher characters and objects than might be cherished elsewhere. How miserably am I disappointed on finding, in a moment, that I am among so many who profess liberal principles only as a *matter of convenience!* The petitioners, too, have prostrated themselves at an age when the mind is more usually moved by generous and bold impulses. The proceeding might have been excusable in weak old age, whose long experience too often brings timidity, but for men who are beginning life, it is a sad commencement. You, Sir, whose constant kindness to the *London University* can never be repaid, are willing to ascribe this silly act to the fears of youth, but there is an armour which students may put on that is proof against intimidation, and he who wears it need not be a veteran.

If the students of the London University hold opinions which are adverse to the present medical regulations, whether agreeing or not with those delivered at the *Crown-and-Anchor*, they ought, without resort to other schools, to declare them frankly, and not merely say, "We *disclaim*, &c." what others have done. How poor and how feeble is the declaration, and the more so from the great length of time which has elapsed, before their fickle sentiments could be forced to an announcement! Change of individuals alone can change the public opinion of the students of the London University, so fouled by this advertisement. Allow me, Sir, in conclusion to add, that the advertisement has completely marred the expectations of those who watched with pleasure the increase of our *liberal* school. The ignominious stain time alone can remove. Your obedient servant,

A STUDENT IN MEDICINE AT THE LONDON UNIVERSITY.

London, Feb. 22, 1836.

LATE ADDRESS TO APOTHECARIES' HALL

To the Editor of THE LANCET.

SIR,—The document published on the wrapper of the last LANCET, is remarkable from more causes than one. The first name that appears in the list is that of Mr. LEGGATT, the late apprentice to Mr. WATSON, the secretary of the Society of Apothecaries. The fourth name, that of Mr. AYRES, is that of one who is already known to the Court of Examiners as being connected with a botanical prize, and who thus expresses his gratitude for the gift. The name of Mr. A. TIBSON, a little lower down, is that of a student who received a similar honour. He, too, thus repays *his* gift. Several other names are those of apprentices of Examiners at the Hall, or of persons who are particularly interested in the welfare of the Company, and these gentlemen have been the indefatigable agents and promoters of the address. They have left no stone unturned to get names to prove — that it is time that *the examinations for diplomas* were made public! I am, Sir, your obedient servant,

AN UNIVERSITY STUDENT.

Feb. 23, 1836.

To the Editor.—Sir,—Permit me through the medium of your valuable journal to respectfully recall to the recollection of Dr. Quain, an assertion contained in his prospectus, issued precedent to the publication of the first division of the series of "Anatomical Plates illustrative of the Structure of the Human Body;" viz. "The work is in such a state of forwardness, as to ensure a regular publication; a fasciculus will be ready for delivery every fortnight on the 1st and 15th of the month." Need I add that the promise has not been fulfilled? It is not the opinion of one individual, but the united opinion of many, that the future fate of the work mainly depends on a speedier publication, for this reason,—that numerous per-

sons have relinquished the work, fearing that the several divisions will never be completed, and that dependent on its present slow publication, by hastening which Dr. Quain would confer a great obligation, not only on the numerous class of medical students, but on medical men generally. I am, Sir, your obedient servant,

A Medical Student.

London, February 23, 1836.

WESTMINSTER MEDICAL SOCIETY.

Saturday, Feb. 13, 1836.

Dr. Addison in the Chair.

The amount of the Society's funds was announced this evening, and it appeared that they were at a low ebb compared with the funds in hand in the preceding year, the difference arising from the small number of new members this session.

Dr. Johnson detailed some further particulars of the case of affection of deglutition and articulation reported in a late Number. The patient was better to-day; the stomach can receive, without much inconvenience, double the former quantity of broth. When injections of broth were administered, although opium was mingled with them, attempts at vomiting had generally followed, but not when the broth was passed into *the stomach*. The system still, as before, retained the nutritious portions of food, and when vomiting took place, all but the nourishing parts were ejected. The pulse, however, gets weaker, and her strength decreases. He proposed to pass the electro-galvanic shock from above downwards, in front, along the course of the eighth pair of nerves, which he believed were implicated in the disease.

Mr. Streeter inquired whether apoplexy during pregnancy was likely to affect the child, and whether utero-gestation proceeded after an attack.

Dr. Uwins supposed that apoplexy was of rare occurrence during pregnancy. He regarded the pregnant condition as desirable to the female who was predisposed to apoplexy.

Dr. Ryan related a case of pregnancy, accompanied with apoplectic symptoms,—the pregnancy eight months advanced; but the patient was predisposed to cerebral affection, and the attack was induced through taking twenty-five drops of laudanum, which led him to regard it not as a genuine case of apoplexy occurring during pregnancy. A practical point, of considerable interest in a medico-legal sense, was that the delivery was accomplished during the state of insensibility.

Mr. Streeter said that he also thought that genuine apoplexy during pregnancy was rare. The following case happened within the last five weeks. The apoplectic seizure was followed by hemiplegia; the woman was three months advanced, and in the thirty-third of her age. The influence of these attacks in bringing on delivery he believed to be considerable. This female had had three miscarriages and two premature labours. Notwithstanding the present attack of apoplexy, gestation was proceeding normally. The paralysis of the left leg, which was not complete, has in some degree subsided, but the arm of the same side remains permanently affected. Consciousness existed up to the time of the attack. The approach of the fit was manifest to a child, by an alteration in the voice, and a particular appearance of the eyes. The sufferer said she felt cold and faint, and experienced a deadened state of the left side. She returned home from a short distance, and ascended a few stairs, but shortly after was found by the servant in a state of insensibility, in which she had remained from ten to fifteen minutes. When somewhat rallied she was bled, and leeches were applied, as she complained of pain over the temples. What was the proper treatment in such a case. Should delivery be encouraged?

The members preferred discussing Hahnemanism, and the question of Mr. Streeter remained unanswered.

Dr. Johnson here made some remarks on Hahnemanism, which we reported last week.

Dr. Uwins acknowledged his total ignorance of Hahnemanism, but as some men of acquirements and good character had embraced the doctrine, he thought it ought to be examined before condemnation. No doubt, Dr. Johnson recollected when he (Dr. J.) condemned phrenology, which he now advocated.

Dr. Johnson replied that he did not advocate phrenology until he had studied it.

A discussion ensued between Mr. Streeter, Mr. King, and Dr. Johnson, with regard to the administration of large doses of tartar emetic, which the two former gentlemen characterized as very dangerous, much mischief being ascribed to the extent to which it was often prescribed. Indeed, remedies in general (Mr. King thought) were given in much too large doses, and especially those of which we could not pronounce the exact effects and mode of operation. Mr. King said that he was fully satisfied that more success had resulted from the Broussaian treatment than was attributed to it, and that it was far wiser to act on the milder than on the more energetic plan of treatment. As to Hahnemanism, though it might be safe sometimes, it was not adapted to the treatment of diseases of a grave nature.

At the conclusion of these remarks, which were more interesting to the audience than

we can make any report of them profitable to the reader, Dr. ADDISON delivered his opinions on Hahnemanism, but of these we have not at present any account before us.

WEBB-STREET SCHOOL.

PRESENT TO MR. GRAINGER.

ON Wednesday last the students at the above school assembled in the Theatre for the purpose of presenting to Mr. GRAINGER a token of their personal regard, and their high opinion of his zeal and abilities as a teacher. The proceedings commenced at one o'clock, when the benches were crowded with pupils.

Mr. CHALDECOTT having been unanimously voted into the chair, briefly and appropriately stated the object of the meeting. Two very highly-finished silver salvers were then brought into the theatre, and exhibited as the intended gifts. Upon the larger was engraved the heraldic arms of Mr. Grainger, with the following inscription:—

"RICHARDO D. GRAINGER,

Viro Humanissimo, præceptori anatomiæ peritissimo, hoc argentum in diuturnum, tum virtutis, tum ingenii, testimonium dono deferunt alumni

A.D. MDCCCXXXVI."

Upon the other was engraved, "Presented in the Theatre of the Webb-street School of Anatomy and Medicine, to Richard Dugard Grainger, Esq., by his pupils, as a very sincere expression of personal attachment and respect, and in especial testimony of the very high sense they entertain of his zeal and ability as a teacher. Feb. 24, 1836."

The Committee then waited upon Mr. Grainger to request his presence, which was accordingly acceded, amid the loudest shouts of applause. When the cheering had subsided, Mr. Grainger was addressed by

Mr. BICKERSTETH* as follows:—"Sir, often as you have been welcomed into this theatre, the occasion was never, perhaps, attended with such a thrill of delight on the part of the welcomers. I approach you on behalf of the pupils, to present you with a memorial of their esteem and regard; but honourable as is the task I have to perform, it is one which is attended with no ordinary degree of difficulty. I have myself not had the gratification of knowing you so long as many who are present, but yet long enough to entertain the warmest esteem for your character and exertions in this school. We are met, sir, to offer you a demonstration of our attachment and respect. I do not refrain from saying much on this occasion because I do not feel much, or because my breast throbs with less intense feelings than move the hearts of those who have deputed me to represent their sentiments. Your presence prevents me from adverting to many things which I should be anxious to say in evidence of my regard for so excellent a teacher, while assuring you of their esteem and respect. Recollecting the circumstances under which this school was formed, and remembering the unparalleled difficulties it has had to encounter, we are persuaded that the undaunted resolution, indefatigable perseverance, and resplendent talents, exercised by your late lamented brother and yourself, could alone have raised it to the eminence which it enjoys, after having crushed the thraldom of monopoly and oppression. (*Loud Cheers.*) Long may it flourish, sir, under your skill and protection, and ever retain its character for industry and independence. It is not my intention, on the present occasion to enter upon a lengthened review of the peculiar difficulties that at one time impeded the onward progress of our profession, but I may perhaps be permitted to remark we are aware of them,—that we are sensible of the extraordinary impediments which were opposed to the exertions of the late respected Edward Grainger, before he succeeded in gathering round him a larger body of pupils than ever flocked to the prelections of any anatomical teacher in this metropolis. But not only did he found a school, which soon became marked for the acquirements of its scholars, but to him may be ascribed the credit of having raised the standard of medical education to a height which it had never before attained in this country. (*Cheers.*) Individually, as a scholar, I feel a debt of gratitude towards him. As a member of the medical profession, I feel it infinitely increased. Would that he could be present! But there is among us one who has confirmed that success which it was to be hoped would crown his labours,—one of his earliest associates in the school,—one who now upholds its reputation with remarkable energy. (*Loud cheers.*) To him, on behalf of the pupils of this school, I beg to express the fervency with which the impression is entertained, and to him,—to yourself, Sir,—our warmest thanks are due. Your unremitting efforts for the welfare and advancement of your pupils demand this from them. The merits of the school do not consist in the magnificence and stateliness of its walls. (*Hear, hear, hear.*) To its internal arrangements are the honours which attend superiority due; and, in this respect, the school of Webb Street may proudly lift up its head as high as that of any school in the metropolis, and no title among students

* This gentleman is, we believe, the nephew of Lord Langdale, the lately appointed Master of the Rolls.

can rank higher than that of being under the instruction of a Grainger, a pupil of this school. (*Loud cheers.*) With the earnest hope, sir, that you may long be spared to enjoy the success of your exertions in the growing advancement of the institution, and that it may be an important place of instruction in the new Metropolitan University, I now, on behalf of your admiring pupils, solicit your acceptance of these memorials of our esteem, attachment, and respect. (*Great cheering.*)

Mr. GRAINGER, amid a repetition of the cheering, then addressed the class.—Although, gentlemen, he said, I cannot plead the excuse that I am unaccustomed to address a public assembly, and still less an assembly in this theatre, where, at all times, I have been received with the strongest proofs of attachment from my pupils, yet, the present occasion, I assure you, finds me at a-loss to express to you the feelings of gratification under which I labour. But I will not, with the vanity which is so inseparable from our nature, attribute all the kindness you have this day manifested, to mere personal motive, but to higher and more distinguished objects. In this institution I have aided in the establishment of a system in which the teachers, trusting solely to their own merits for success, have met with the reward which usually attends indefatigable industry, and to the influence which this school has consequently had in promoting the general welfare of the medical students in this metropolis, and the improvement of medical education generally, do I chiefly ascribe the possession of those honours which have been conferred upon me to-day. This theme is to me more grateful than that of my own humble talents. Few who are now here can tell the condition of the metropolitan schools, or the condition of medical education, when this school was first established. At present it must afford us the greatest satisfaction to see that, in every school in this metropolis, the only rivalry among the teachers is who shall most efficaciously discharge their duties, but there was a day in which the medical student had to look rather to his own unaided and unguided exertions than to any benefit he could hope to receive from his instructors. (*Hear, hear.*) There was not then, in this great metropolis, probably more than one teacher employed in communicating a knowledge of practical anatomy to a class of from three to four hundred students, and you who are employed in the active study of your profession must be aware how utterly incapable one individual would be to afford instruction to so multitudinous an assemblage. The students were entirely thrown upon their own resources to obtain that acquaintance with the human body which is so indispensable to the safe practice of their profession. You will judge, then, what medicine owes to the founder of this school (and in the benefits of which I myself have greatly participated), who sunk into an early grave, the victim of industry in the cause of science. I gladly avail myself of the opportunity of thus publicly recording the debt of gratitude which I myself owe to my lamented relative, and to point out the claims he had on your admiration as the founder of this school. I can hardly describe the difficulties which he had to meet—offered to his progress by opponents who ranked among the first men in the profession; and his competitors were no less in station than a Cooper and an Abernethy. Yet not only did he establish the school, but he acquired for it in five years the highest reputation, and he had assembled around him, unaided by the slightest extrinsic agency, a larger class than had ever before attended the most celebrated teacher of this or any other metropolis. I lately had occasion to send to his Majesty's Government an account of the number of students who attended his lectures, and I confess to you, that although I was aware that their numbers were very great, yet, so many years having elapsed, upon referring to the book in which these, in some degree, sad memorials, were recorded, I was surprised to see the immense number to which they reached. Gentlemen, my only claim upon your kind feelings arises from the circumstance that I have, in some degree, with the assistance of my able colleagues of that and subsequent periods, maintained the success and reputation of the school. (*Hear, hear.*) I mentioned to you, gentlemen, that when this school was first instituted, the profession of teacher was in a very few hands, and the system allowed them all to be appointed through the means rather of family connection and influence with powerful corporations, than any intrinsic merit of their own. Not that I wish in the least degree to reflect upon individuals. I speak of the system, and say, without the fear of contradiction, that the plan at one time was to adopt only those teachers who had the strongest recommendations from relations, and who could catch the ear of those who had the bestowal of the honours of the profession in their hands. (*Hear, hear, hear.*) Observe the contrast now. It is not from the name of an institution; it is not on the score of its wealth that success is to be found. The present age looks more to acts than to professions, to men than to institutions. (*Hear, hear.*) I would ask those who have watched the progress of medical education, and attended to the gradual improvements which have been introduced into the several schools of this metropolis, whether they have not originated from the talents, the services, and the unabated exertions, that were employed in the founding of this school? Not that my brother was the creator of those

principles which are now in operation. He was merely their representative. With regard to myself, gentlemen, at the time when I was called upon to fill the office which I now hold, I was in many respects unfitted for its duties. I was unprepared by previous education, but I studied unabatingly to enable me to contend against that opposition which my brother experienced in all its virulence. I make no personal reflections, but when we are considering the acts of public bodies, we are justified in employing the utmost scrutiny, and, if they deserve it, in visiting them with our reproach. It has been for years my object to avoid every thing like personal reflection on the conduct of my competitors, but I will boldly assert that some of the corporate bodies of our profession left no efforts unturned to suppress this school, and, gentlemen, the attempt was energetically made by the College of Surgeons against myself. Through me they wished to suppress freedom of instruction, and the independence of the medical student. Yet you, who are the junior members of our profession, have as great a right to choose who shall be your instructors as the first persons in the land. (*Great cheering.*) The attempt, however, was made to suppress every private medical institution in this metropolis, and so to limit the choice of the student as to where he should receive his education. Within six months from the period of my brother's death—aye, within three months—the Council of the College of Surgeons of this metropolis issued a series of regulations, in which they stated that they would not receive certificates of attendance upon lectures delivered in any private school, unless that school could obtain the *recognition* of one of the metropolitan hospitals, thus throwing the guardianship and the rights of our profession into the hands of the hospital surgeon and physicians of this metropolis. Ought the College of Surgeons to have bestowed the power of crushing private institutions on rival bodies in the public schools? Governing bodies should retain to themselves those discriminating powers which, when justly and honourably applied, no one could complain of. I will just state how far these regulations were aimed at myself. The College of Surgeons not only would not recognise any private school, unless it had previously received the recognition of one of the hospitals; but they held a discussion, whether they should receive the certificates of my lectures, although I had already delivered a whole course of lectures in the winter, the certificates of attendance on which had been received by the College of Surgeons, thus intending, by means of this *ex post facto* law, to put me and the school down. I am perfectly justified in alluding to these acts of a public body (*cheers*); but I will make one grateful acknowledgment to an individual to whom I feel deeply indebted in those transactions. I allude to a highly-distinguished surgeon, who enjoys an European reputation, who advocated my claims when the question came to be considered at the College of Surgeons, and by which means this school was preserved in existence. I allude, gentlemen, to Sir Astley Cooper. (*Loud cheers.*) There was a great discussion in the Council as to the reception of my certificates, and Sir Astley Cooper, as I have heard, strongly advocated the justice of my claims, and it was represented to me that had it not been for that advocacy, in all probability my certificates would have been rejected. This is the only allusion, gentlemen, that I shall make to any individual, and I make this public avowal of the high sense I entertain of his liberality on that occasion with the greatest pleasure. Fortunately the time has now gone by when the acts of a self-elected Council can suppress those principles of medical education which have since extended with such rapidity and power, not only in London, but in almost every considerable town in the kingdom. This opportunity of gaining medical instruction in the country is most valuable to the student. I conceive it to be a point of immense importance that as soon as the whole routine of compounding, and so forth, is understood, the medical student should be initiated into those principles upon which the successful practice of his profession must rest. There is no fear of medical education again retrograding. Gentlemen, for myself, I have been enabled to take but a trifling share in the work, and the difficulties which I have had to overcome have been balanced by many pleasures. I have ever received the warm support of the students of this school in my efforts, and not only in a public point of view, but I am proud to acknowledge that some of the most valuable friendships I have ever formed I owe to my connection with students as a private teacher. I am, too, most ably supported by the talents of my colleagues, and not only by that, but by the strong feeling which has existed in the profession generally, that to support this school was to maintain a great principle. These advantages were quite sufficient aid to my laudable efforts. (*Hear hear.*) Gentlemen, amid so much, which both retrospectively and at present is highly gratifying to me at this moment, there is one circumstance which I confess throws a shade of gloom over this occasion. I am sorry that among my excellent and worthy colleagues I do not observe one here who is as dear to you as he is to myself (Mr. Millard). I have had the opportunity of watching his rising worth, and the happiness of seeing him placed in a situation where his excellence could be esteemed on a larger scale. And I regret that we are

deprived by a melancholy cause of his presence. Gentlemen, I will not trust myself to speak further on this distressing subject. Enough, gentlemen, has been said of myself; too much for the ordinary influence and habits of my mind. I am not accustomed, nor do I wish, to intrude myself on the ground of my own personal value. I would rather look on this costly present as a proof that you admire the system of which I in some measure have been the representative, than as the reward of any exertions of my own. Yet if any labours of mine have in the least degree contributed towards advancing the welfare of the pupils of these schools, if in short I have deserved, as I have this day received, so ample an expression of your approbation, believe me my utmost ambition is gratified.

Mr. Grainger then withdrew amidst loud and long-continued cheering, and votes of thanks were unanimously given to the chairman, and to Mr. Davis, the Hon. Sec., for the able and satisfactory manner in which they had discharged the duties allotted to them.

Those gentlemen having returned thanks the assembly dispersed, apparently with feelings of great gratification at the proceedings of the day.

COLLEGE OF PHYSICIANS.

THE *Soirees* at this medical show shop, *inside* of which we have once a year just such a display as is made to the gaping multitude *outside* of Richardson's booth at Bartlemy-fair, were resumed on Monday last, and every exertion was made at this eventful moment to produce such a display as would strike the licentiate populace with admiration of the extent of the worldly connections and influence of Sir HENRY HALFORD, and convince them what folly it was to try to reduce the professional power of a man of genius in the strong hold of a Royal College. The populace came, and we believe were fully convinced both of the absurdity and the impropriety of directing the battering-ram of reform against the walls of a citadel which contained within it such an army of archbishops, lords, lawyers, artists, and eminent fellows, as were found in array on the present occasion. The Emperor NICHOLAS, at Kalisch, had not more cause for, nor found better success in, exhibiting his troops to the view of Europe, than had Emperor HALFORD in Pall Mall on Monday night. In fact, the licentiates and subordinates having attended at the review, had the comfort of a cup of tea, and departed with resolutions to abandon the siege. Indeed, what could men even of superhuman courage do in the field against the Archbishops of YORK and CANTERBURY, Lords MELBOURNE, LANSDOWNE, WESTMORELAND, and HARROWBY, the PRIMATE, Lord SEPTON, Sir MARTIN ARCHER SHEE, Mr. GODWIN, and other such powerful medical warriors?

Some considerable time, of course, was allowed to the licentiates, and the top-apothecaries and the top-apothecaries' apprentices who were mixed with the army of licentiates, to contemplate the enemy, and that period was occupied by an oration from his little Majesty, who took the field in person, and occupied the centre of the troops. The subject was wisely and discriminately chosen. *Death* and immortality formed the theme. In times of war the hosts of battle need encouragement to fight to the death, unless immortality is the reward. With extreme delicacy and tact, however, the orator avoided a direct selection of illustrations from the military mausoleums of antiquity, and as the institution to be defended was one of science, he drew his inspiriting examples from the last scenes of the illustrious philosophers of the two past centuries, —from the deathbeds of Bacon, Boyle, Locke, Newton, Jones, Addison, Dryden, Johnson, and Pope, who all died "in the purity of the gospel, by whose light," &c. &c. The oration produced its full effect. The orator had taken the pains to learn the oration by heart, for he pronounced it with one eye on the bishops and the other on the ministers of state, wisely watching in their countenances the impressions which his theological topics and his natural eloquence were producing, as the sentences rolled in a beautiful Mosaic stream of mingled English and Latin, from his lips.

Those licentiates who deposited their helmets and coats of mail with the suttlers of the camp, while looking on in the sultry atmosphere, had better luck with them at the retreat this year than in 1835, when such a number were stolen that a great portion of the retiring troops went home almost naked. On this occasion better care was taken, and only a few suits of upper armour were lost.

It is said that the licentiates found the enemy so strong, that in a council of war held the same night at the Athenæum, it was resolved to make application to a foreign power for intervention in their favour, and that the famous General, SPRING RICE, of the kingdom of Westminster, has signified his intention to come immediately to their aid with an overwhelming force.

LATE ADDRESS TO APOTHECARIES' HALL.

To the Editor of THE LANCET.

SIR,—Your remarks on the advertisement of the medical students of the *London University*, inserted in your last Number, were —"That you regarded it as an aid of the prayer of the great meeting in the Strand, and as a proof of the iniquitous power and influence possessed by those secret tribunals which can, by exciting the terror of some candidates for examination, exhort such a declaration from so great a number of students." But, in another part of the article, you stated that these gentlemen formed no part of the meeting at the Crown-and-Anchor. This is a mistake, for a number of the students who have *signed that document* were present at that meeting, and *voted in favour of the resolutions*. I have asked some of them, why they signed a paper which stated that they had not had any connection with the meeting, its originators, or its *proceedings*, when the reply was, "Because I am going to the Hall."

But, Sir, the advertisement is not solely signed by the medical students of the University. In the list there are the names of gentlemen who are merely *general students* in the University, and also of many ex-medical students who are *now* surgeons and apothecaries, *having passed both College and Hall*. The originators of the document are admirers of the present system of examination, and they used every endeavour to obtain signatures to it, not scrupling to get gentlemen to sign it, who, as I have before stated, are *not medical students*.—The originators of the document not wishing to pay the expenses of advertising it themselves, and wisely thinking that if they asked for a subscription at the time of asking for the signatures, they would get very few of either, they had recourse to the following manœuvre:—they said not a word about the subscription until they had got all the signatures; then they placed a paper in the beadles room, stating that it was *necessary* for each gentleman who signed the paper to pay one shilling for advertising it. And by this method they have got a considerable number of shillings. What they intend to do with the surplus I know not. I remain, Sir, yours in haste,

SCRUTATOR.

NORTH-LONDON HOSPITAL.

OSTEO-SARCOMA.—OPERATION.

MR. LISTON removed an osteo-sarcomatous tumour from the lower maxillary bone of a little boy aged ten years. The tumour was first noticed about three months since, after the extraction of one of the temporary teeth which was in a decayed state, and which had given rise to gum-boil. The tumour was on the increase, and being evidently of a malignant nature, it was thought expedient to remove it without delay. It filled the situation of the second temporary grinder, but in its growth had displaced two of the adjacent teeth, occupying about an inch and a half of the alveolar process on the right side. The operation was performed in the following manner:—An incision, commencing a little above the point of the chin, and being carried along the base of the jaw to the angle, in a semilunar direction, the flap was dissected up, so as to expose the bone, and open the membrane of the mouth freely; the mylo-hyoideus and other parts connecting the tongue with the inner side of the jaw were then detached, the knife being introduced from without, and guided by the finger of the left hand, introduced into the mouth. The full extent of the tumour being then distinctly ascertained, the first temporary grinder, the permanent lateral incisor, and the first permanent molar teeth, were immediately extracted. A small saw was applied in front and behind the tumour, in the spaces from which these teeth had been extracted, so as to divide the jaw to some extent perpendicularly. A pair of strong cross-cutting pliers were then employed, so as to embrace the portion of the bone to which the base of the tumour was attached. This was easily divided, and the tumour was extracted. The wound was then brought together by two or three points of interrupted suture. The whole proceeding occupied a very few minutes. Mr. Liston afterwards remarked that it might appear to be a severe operation; the suffering, however, was not so great as would be supposed, but all operations upon the jaws had a frightful appearance. He had made the incisions in such a way, that had the tumour been found to involve the jaw more extensively, the whole thickness of the bone, to any extent, might have been extirpated. It was impossible, before the incisions were made, to know the exact extent of the tumour, and he considered it proper to proceed in such a way, in order that, under any circumstances, the whole disease might be removed. Fortunately it was found possible to preserve the base of the jaw. Consequently there would be little or no deformity. The disease, he added, was very rare in young subjects, and he never before, out of a number of cases which he had witnessed or treated, had seen it follow any decay of the temporary teeth, or disease of their sockets. The tumour seemed to the touch to be composed partly of soft matter, and partly of bone. It was a "veritable osteo-sarcoma."

THE

REFORMED MUNICIPAL CORPORATIONS AND MEDICAL CORONERS.

Mr. GEORGE ROGERSON, Surgeon, of Liverpool, acting on the hint which we lately put forth in THE LANCET, has just published "A Letter to the mayor, aldermen, and councillors of the reform corporations, on the necessity of electing medical coroners," in their respective boroughs.

"This," says Mr. Rogerson, quoting from Junius, "This is not the cause of faction, or of party, or of any individual, but the common interest of every man in Britain."

The example set by Mr. Rogerson is excellent and most timely.

GOWER-STREET.—*To the Editor.*—Several students in the dissecting school beg to express their regret (in a form which will perhaps lead to a remedy) that the time of the demonstrator should be so much occupied with pursuits which prevent him from giving to the instruction of the pupils all that attention which he formerly devoted so exclusively to his important duties. [Our correspondents should have stated the name of the demonstrator. Complaint should be made in the quarters whence the appointment is obtained.]

SIR CHARLES CLARKE, we are happy to be able to state, is one of those distinguished individuals whose name is to be placed on the list of Metropolitan University Commissioners. His liberal principles and his being altogether unconnected with any school or intriguing faction, eminently qualify him for this distinguished honour.

(*From a Correspondent.*)—Dr. W. CUMMIN, in deference to the exasperated feelings of the students and general practitioners, is about to relinquish his connection with the Aldersgate-street school.

A Report on the Medical Management of the Native Indian Jails throughout the Territories subject to the Governments of Fort William and Agra, with some Observations on the Principal Diseases to which Native Prisoners are liable. By James Hutchinson, A.M., M.R.C.S.L., and Sec. to the Med. Board of Bengal. Thacker, Calcutta; and Parbury, London; 1836, 8vo., pp. 107.

An essay on the Laryngismus Stridulus, or Croup-like Inspiration of Infants, with Illustrations of the Principles of the Pathology of Nerves, and of the Functions and Diseases of the Par Vagum and its Principal Branches. By Hugh Ley, M.D., Lect. on Mid. at St. Barth.'s Hosp. &c. With plates. London: John Churchill, Princes-street, Soho; 1836, 8vo, pp. 484.

The Anatomy of Melancholy, What it is, with all the Kinds, Causes, Symptoms, Prognostics, and several Cures of it. In three partitions. With their several Sections, Members, and Subsections, Philosophically, Medicinally, Historically, opened and cut up. By Democritus Junior. To which is prefixed a satyricall preface, conducing to the following discourse. 16th edition. Printed from the authorized copy of 1651, with the author's last corrections, additions, &c. &c. London: Blake, and Chidley, 1836. 8vo. pp. 744.

The Naturalist's Library, vol. 12; Goats, Sheep, &c. With coloured plates. London: Highley.

CORRESPONDENTS.

The letter respecting the meeting at *St. Thomas's Hospital* reached us, and it was designed to be inserted, but on receiving a copy of the following resolution, in which the students at that institution express their strong opposition to the proceedings of the Apothecaries' Company, we saw reason to doubt the correctness of some of our correspondent's inferences. The resolution says,—"That this meeting regrets there does not exist a second examination for medical pupils, and that second examination a *public* one, to which any rejected candidate might appeal, as this would at once silence the murmurs of incompetency, and destroy the possibility of *private injustice*. *That this meeting also strongly disapproves of the principle of self-election and irresponsibility* in medical corporations.

"W. WEGG,
CHARLES EDWARD BLAIR, Sec."

Mr. Samuel.—It is not on Fri ay week, but on Tues lay next. There will be no speechifying on the occasion.

Anti-Humbug should favour us with his name and address confidentially.

Q. in the Corner may be assured that the College of Surgeons will *not* discharge its duty to the profession.

The letters of *Dr. M'Carthy*, *Mr. Eckley Pattison*, *Mr J. C.*, and *Medicus Dumfriensis*, have come to hand.

Such a mass of communications have reached us relative to the proceedings at the late inquest at Limehouse, that we are obliged to postpone for a week a further account of them.

The communications of *Dr. Bow*, *Mr. Fisher*, *Dr. Kelso*, *R E. L.*, *&c.*, *have been received.*

ERRATUM.—Page 887 of the present No., line 6 from bottom, erase *St. Petersburgh*.